Compared with the census of 1850, we have the following numbers and proportions to the population of the same color and condition:

	1	850.	18	360.
	Number.	Proportion.	Number.	Proportion.
White, deaf and dumb Free colored, deaf and dumb Slaves, deaf and dumb	9, 136 136 531	1:2,140 1:3,095 1:6,034	11,856 157 808	1:2,275 1:3,037 1:4,890

In the preliminary report, by including 2,256 returned as "deaf," the number of white and free colored deaf and dumb was made 14,269, and the proportion 1:1,925. The tables for the deaf and dumb slaves, have not been revised to exclude the "deaf," which is doubtless the reason the proportion of deaf and dumb slaves seems so much larger than it was in 1850.

The proportion of deaf mutes returned from the white population, appears to be steadily decreasing since 1830, as is indicated by the following table, repeated from the preliminary report, (p. 37,) with the correction for the returns for 1860 by excluding the "deaf:"

Number of white deaf and dumb.	Proportion.
5,363	1:1,964
6,682	1:2,123
9,085	1:2,152
11,856	1:2,275
	5, 363 6, 682 9, 085

A comparison of the different sections of the Union, shows that the decrease has been only in the northern States, the proportion in the southern States having varied but little during the thirty years.

Proportion of	aeaf m	utes returnea	among the	w n ite рорию	tron.
		ı ı		ı -	

	1830.	1840.	1850.	1860.
New England Middle States* Northwestern States Southern Atlantic States† Southwestern States‡	1:1,800	1:1,854	1:1,950	1:2,110
	1:1,923	1:2,201	1:2,233	1:2,364
	1:2,244	1:2,780	1:2,285	1:2,450
	1:1,830	1:1,790	1:1,820	1:1,854
	1:2,284	1:2,028	1:2,180	1:2,140

The most obvious theory to account for this difference between the two great sections of the Union, refers the apparent diminution in the proportion of deaf mutes from the northern States, to the large accessions to the population of those States by emigration from Europe, which, as was stated in the preliminary report, does not bring with it a proportional number of deaf mutes.

It may also be observed that the opening, within the past fifteen or twenty years, of several institutions for the deaf and dumb in the southern States has had the effect not, of course, to increase the number of deaf mutes, but to bring them to light, and make them less liable to be overlooked by the census marshals.

Yet, after making every allowance, it appears from the returns that the proportion of deaf mutes in New England especially, is becoming less at every census, in a proportion for which the European

^{*} New York, Pennsylvania, New Jersey, and Delaware.

emigration to that section does not seem sufficient to account. For this result we will presently offer an explanation.

In comparing the proportion in different sections of the Union, we cannot do better than to take the returns as they are, assuming that the sources of error are so far uniform in their operation, that in an aggregate of several hundred returns, forming the sum total of a section of the Union, the amount of errors will probably be proportionally uniform. But for other statistical purposes, it is desirable to have data for an average of corrections.

Of the errors in an enumeration of the deaf and dumb, the one susceptible of the most certain correction from the returns themselves is the frequent return of the same person twice. All the schools for the deaf and dumb in the country, it is believed, were in session on the 1st of June, the day to which the census refers; and all, so far as we have ascertained, dismissed their pupils for the summer vacation within a few weeks after that day. Thus it happened that, while for three-fourths of the schools the marshals returned the number of deaf mutes actually in the institutions on the 1st of June, a large proportion of the same deaf mutes were at home for the vacation, in July and August, when the census marshals called, and in many cases were returned a second time. It has been ascertained by very careful examination, that out of 296 pupils of the New York Institution, returned to the assistant marshal of that district as being there on the 1st of June, not less than 80 were a second time returned from their own homes. If we assume, as is very probable, that a like proportion of the pupils of the other schools were returned twice, the number of such returns in the whole country would be not far from 400. A few other deaf mutes, who, perhaps, changed their residence about the time the census was taken, also appear twice on the returns.

From the Indiana Asylum only seventeen deaf mutes are returned, though the report of that school for 1860 states that it had that year about 170 pupils. The presumption is, that the marshal happened to call while most of the pupils were at home, and only took down the names of the few whom the distance of their homes compelled to remain in the asylum during the vacation. Some other institutions, as those of Iowa, North Carolina, Tennessee, Mississippi, and California, do not appear on the returns, probably because at the time the census marshal went his rounds both teachers and pupils were dispersed for the vacation.

A more particular examination in the case of the North Carolina Institution, shows, that of thirty-eight pupils on the list of that institution, as given in their report for 1860, nineteen (one half) were returned from their respective counties, the other nineteen being entirely overlooked.

Another source of error is the occasional return of *idiots* as *dumb*. On this point, however, we have not obtained any data that would authorize us to make an average of corrections. The distinction between *idiots* and *deaf mutes* is now so generally understood, that it is presumed, at this day, few of the assistant marshals would return the one for the other. In quite a number of cases idiocy and deaf-dumbness are returned as united in the same afflicted individual.

It remains to speak of omissions and deficiencies. Of these, the most remarkable is the omission in every census, of more than half of the deaf and dumb children under ten years of age. Comparing the white deaf and dumb under ten years, between ten and twenty, and over twenty, with the white population of the same age, we have the following proportions:

	Under 10.	10 to 20.	Over 20.
New England	1:4,365	1:1,570	1:1,960
New York	1:4,500	1:1,500	1:2,660
Pennsylvania, New Jersey, and Delawaro	1:4,070	1:1,490	1:2,200
South Atlantic States	1:3,520	1:1,500	1:1,610
Southwestern States	1:4,330	1:1,490	1:1,880
Northwestern States	1:4,480	1:1,555	1:2,450
The United States	1:4,170	1:1,525	1:2,214

The Pacific States and the Territories are not classified, but are included in the total of the United States.

The large proportion between the ages of ten and twenty, is owing, in part, to the number returned twice, most of whom are between those ages. Allowance being made for this, the proportion will be about one deaf mute between the ages of ten and twenty to every 1,700 inhabitants of the same age. The uniformity of this proportion in every section of the Union is remarkable. Even after making this correction, the proportion of deaf mutes between the ages of ten and twenty remains considerably larger than the proportion above the age of twenty. To account for this, we observe that about fifteen hundred and forty pupils of the different institutions are included in the returns; and, as we have seen in the case of North Carolina, many of them would, if at home, be either overlooked altogether, or returned as deaf only. The fullness of the returns for those ages is, therefore, not an indication that there are more deaf mutes, proportionally, between ten and twenty, but only that, when collected into institutions, they are much more likely to be returned than when scattered through the community.

In explanation of the small proportion returned as under ten years—a feature, by the way, common to every enumeration of the deaf and dumb in Europe* or America—we observe that the deafness of a child is hardly suspected, and cannot be ascertained for several months after birth; and its parents, clinging to hope to the last, are usually unwilling to admit that their child is destined to be a deaf mute, till it has passed the age at which other children speak fluently; and if the child became deaf after learning to speak a few words, its friends refuse to admit that it is *dumb*. Hence, many deaf-mute children are either not returned at all, or returned as "deaf" only, who, a few years later, as pupils of an institution, will be returned as deaf and dumb. The small proportion returned as under the age of ten, therefore, only indicates that the deaf-dumbness of very many children was unrecognized, overlooked, or concealed.

A reference to the table of the deaf and dumb, classified according to age, will put this point in a clearer light. The number returned as under one year is only 11. Under five years (including those under one) there are returned 416; between five and ten, 1,432; between ten and fifteen, 2,084. The obvious inference is, that hardly one-fifth of the deaf mutes, or those destined to be such, under the age of five, find a place in the returns; while between five and ten, a much larger proportion are returned.†

Yet it would appear, from an examination of the list of deaf mutes for two or three States, that even as late as the age of ten or twelve, not far from half the deaf and dumb children are omitted. Out of one hundred and one pupils received by the New York Institution from that State and New Jersey, during the two years next succeeding the taking of the census, after making liberal allowances for erroneous copying from illegible writing, only forty, or about two-fifths, can be found in the census list. Of those from country districts full half are found in the census, while of those from the large cities hardly one-fifth appear in the census. The case is probably about the same in other States, as we find that of nine pupils received into the North Carolina Institution, a few weeks after the census was taken, only five are to be found in the census.

We have referred to the greater number of omissions in the returns for cities and large towns. This is a prominent feature in every census of the deaf and dumb taken in this country, and has often been referred to by those who have treated of the statistics of this class. As a general rule, the proportion of deaf mutes returned from cities (excluding institutions) is only about half as great as that returned for country districts. The following table shows the number of deaf mutes (without distinction of color or condition) in those cities of the United States whose population, in 1860, exceeded one hundred thousand. The returns from institutions are not included.

^{*} From a table in the Thirty-Fifth Annual Report of the New York Institution, it appears that out of 16,890 deaf mutes returned from six countries of Europe, for which the ages were distinguished, only 2,705, less than one-sixth part, were under ten years of age. The ratio in the United States is about the same.

[†] The following record appears on the returns of Fairfield county Connecticut: "Hannah Dugey, aged 100, born in Connecticut; deaf and dumb; of sound mind."

Table showing the number of deaf mutes in the principal cities of the United States in 1860.

Cities.	Population,	Deaf and Dumb.
New York	805, 651	197
Philadelphia	562, 529	167
Boston	177, 812	48
Baltimore	212, 418	5 1
New Orleans	168, 675	43
Cincinnati	161,044	35
St. Louis	160,773	37
Brooklyn	266,661	48
Chicago	109, 260	14
Total	2, 624, 823	640

The proportion is only one deaf mute to 4,101 inhabitants. Taking the white and free colored population of the whole Union, without these cities, the proportion is one deaf mute to 2,070 inhabitants; but if the returns from the institutions be excluded, to make a fair comparison, there will be returned from the States, exclusive of the great cities, about one deaf mute to 2,400 inhabitants. But as this includes the returns from many cities and large towns of less than 100,000 inhabitants, most of which also return a small proportion of deaf and dumb, it may safely be assumed that, on a general average, only about half as large a proportion of deaf mutes are returned from cities and large towns as from country districts. Yet there is no reason to suppose that the proportion of deaf mutes found in cities is really smaller than in the country. If discomfort, want, and intemperance be regarded as among the causes of a greater prevalence of deaf-dumbness, nowhere are they found in such miserable extremes as among the poor of cities; and it has been found that cities are apt to send, at least, their full proportion of pupils to the institutions for deaf mutes. The small proportion returned for cities is, therefore, to be ascribed to the greater haste and carelessness of assistant marshals hurrying from door to door in a populous city, among families most of whom are strangers to him, while the marshal who takes the census of a small district in the country generally knows of all the deaf mutes in his district, and hence is much less likely to overlook them.

We have already observed that there appears to be a smaller proportion of deaf mutes returned from the foreign population; partly, perhaps, because the assistant marshal, in many cases, could not make his questions fully understood; but also, in great part, because a small proportion of deaf mutes seems to go along with the emigration, whether from Europe to America, or from the eastern to the western States.

Resuming these several cases of greater inaccuracy in the returns, we find that, 1st, children under ten; 2d, large cities; 3d, emigrants, especially foreigners, each present a very small proportion of deaf mutes. Hence, a district where the proportion of children is large, one where a large proportion of the population live in cities, and one where there is a large immigrant population, will respectively return small proportions of deaf mutes. The first is the case with the northwest and southwest; the second, more especially with New York and southern New England; the third, with New York and the northwest. Allowing for these several causes, the tendency to deaf-mutism in the different sections of the country becomes much more nearly equalized. The southern Atlantic States, which return the greatest proportion of deaf mutes, it will be seen, though they have about an average proportion of children, are losing largely, instead of gaining, by emigration, and contain comparatively few large cities.

Even in country districts, and among the native population, there are evidently many omissions in the returns. We have already referred to the fact, that of the pupils of the North Carolina Institution, who seem to have been all home for the vacation when the census was taken, only one-half can be found on the census list. And after a very careful examination of the lists for New York and New Jersey, out of seventy-two pupils dismissed in the two years preceding the census, (not counting those from the great cities,) only thirty-two can be found in the census. A few of the remainder may have

died or changed their residences; still there seems no reason to doubt, that, of those deaf mutes not actually in school, a large proportion were omitted; and hence, chiefly, it is, that a smaller proportion was returned as over twenty years of age.

Some of these omissions may be accounted for, by what the returns indicate as quite a frequent inadvertence, the writing of the words "deaf and dumb" on the wrong line; thus returning, instead of the deaf mute himself, the name that stood next his own. The tendency, in this case, is rather to write on the line above than on the one below. In this way, probably, several very old people were returned, as deaf and dumb, instead of younger members of their respective families. On the whole, however it may be assumed that such errors, not affecting the *number* of deaf mutes, but only the sex and age, will nearly balance each other.*

From the several considerations that have been presented, it is manifest that the nearest approximation we can make from the returns of the census, to the true proportion of deaf mutes in the country, is, by taking the number returned as between the ages of ten and twenty. Even between those ages, there are probably omissions enough to balance the number returned twice; which will leave a quite uniform proportion in all sections of the country of about one deaf mute to fifteen hundred inhabitants, a proportion but little smaller than that found in Europe.

An examination of the proportions in the several States shows that Virginia and Kentucky present at each census a large proportion of deaf mutes; at the last census, a considerably larger proportion than was returned from any other section of the Union of equal population. This will appear from the annexed table, (referring only to whites:)

	1830) .	184	0.	1850	0.	186	0.
	No. of deaf and dumb.	Proportion.						
Virginia Kentucky The United States	419 303 5,363	1:1,657 1:1,709 1:1,964	453 400 6,682	1:1,636 1:1,476 1:2,123	540 507 9,085	1:1,640 1:1,502 1:2,152	676 574 11, 856	1:1,550 1:1,602 1:2,275

Whether this extraordinary prevalence of deaf-dumbness in the central belt of country immediately north of the parallel of 36° 30′, is to be ascribed to the influence of climate, or of geological formation, (much of the district being mountainous, and much of the remainder a limestone region,) or is rather a peculiarity of the nearly homogeneous population of those States, it would be premature, in the present state of our knowledge, to express a decided opinion.

We observe, however, that it *does* appear from the returns that, other circumstances being about the same, there is usually a larger proportion of deaf mutes in a district of homogeneous population, than from districts whose population is more mixed. This fact is of like purport to the fact, familiar to students of vital statistics, that deaf-dumbness, idiocy, and other cases of arrest or imperfection of development, are more apt to appear in the offspring of parents who are related. What is true of individual families, may be true of whole communities; and thus, perhaps, there is a greater tendency, other things being equal, to deaf-dumbness, and other organic defects, in a comparatively stationary and homogeneous population, than in a migratory and mixed population.

The decrease in the proportion of deaf mutes returned from New England, in so far as it is real, (for much of it is probably only apparent, owing to the greater proportion of population in cities, the returns from which, as we have seen, are usually very defective,) may, probably, be ascribed, in part, to the population of that section of the Union becoming less stationary and homogeneous, than it was thirty or forty years ago; and in part, perhaps, to a more general progress of physiological knowledge.

^{*}The return from Marion county, Va., of an infant of one month old, as "deaf," is probably a case of writing on the wrong line. The deafness could not be known at that age.

Restoring the pupils in the Asylum at Hartford to their respective States, we find the following proportions of deaf mutes returned from the several New England States, in 1830 and in 1860:

	1830.	1860.
	Proportion of 1 to	- Proportion of 1 to-
Maine		1,950
New Hampshire	1,816	1,850
Vermont	1,607	1,905
Massachusetts	2,045	2, 418
Rhode Island	1,672	2,709
Connecticut	1, 426	1,990

It will be observed that in Maine the proportion of deaf mutes has increased, and in New FlamPshire has remained about the same. Of all the New England States and, indeed of all the northern States, Maine has the largest per-centage of State-born population, and New Hampshire the next largest. The States where the proportion of deaf mutes is least, Massachusetts and Rhode Island, are those that have the largest proportion of immigrant population.

On the whole, while some part of the decrease in the ratio of deaf mutes, in New England, may be due to a more enlightened avoidance of some of the causes of deaf-dumbness, most of it is probably to be ascribed to the influx of immigrant population and the imperfectness of the returns from large towns.*

It is a remarkable feature in the returns, though one common to every enumeration of the deaf and dumb, in Europe as well as America, that male deaf mutes so largely exceed the female. Even in States where there is a large excess of female population, there are many more male than female deaf mutes. The same is true of the idiotic, and, in a less degree, of the blind and insane. Among the deaf and dumb, the sexes are thus distributed:

	Males.	Females.
Under five years	227	189
Five to ten		667
Ten to fifteen	1, 168	916
Fifteen to twenty	1, 101	905
Twenty to thirty	1, 258	976
Thirty to forty		554
Forty to fifty		463
Fifty to sixty		309
Sixty to seventy	194	156
Seventy and upwards	104	101
Ages not returned		14
Total	6,606	5, 250

More than five males to four females. In 1850, there were returned from ten States, (Compendium of the Census, p. 59,) 1,408 male deaf mutes to 1,129 females, just about the same proportion. In Massachusetts, where the female population considerably exceeds the male, we find in 1860, 242 male deaf mutes to 180 females, the large proportion of four to three.

The excess of males among the idiotic is still greater, being in 1850, as three to two. For the blind, the excess of males is less than for the deaf and dumb; and for the insane, the difference is still less.

Observing that the deaf and dumb, and the idiotic, are such from birth or childhood, and that most of the blind, and especially of the insane, became such after reaching the adult age, the conclusion to be drawn from the facts just set forth is, that not only is the male sex more liable than the female to the diseases and accidents that affect the mind and its chief organs of sense, but also is, in a much greater degree, more liable to be born with imperfect organs.

^{*}It would be an interesting inquiry, whether deaf-mutism and other organic defects in children prevail most among the offspring of early of of lates marriages. The largest proportion of deaf mutes, and especially of deaf mute children, other things being equal, is in those States where early marriages seem to be most common; as in the southern States.

DEAF, DUMB AND BLIND.

Little more than half a century ago, it was often asserted that there was no individual known in any country, laboring under this three-fold accumulation of afflictions. Cases, however, in which children were even born both deaf and blind, soon came to light. One of these, James Mitchell, of Scotland, lived to mature age, and gave such proofs of mental activity in employing his remaining senses of touch and smell in establishing some communication with the external world, and with those persons with whom he lived, as made his case an object of profound study to some of the most eminent philosophers of his time. When enumerations of the deaf and dumb began to be taken, it was found that the deaf are no more exempt from blindness than are those who hear. A census of the deaf and dumb in the Sardinian States, taken about thirty years ago, showed seven also blind among 4,778 deaf mutes, one to 680; and there were found in Denmark three such among 630, one also blind to 210 deaf mutes. In Sweden and Norway, the proportion of blind deaf mutes is still greater.

From a table on page L of the quarto volume, census of 1850, it appears that in only thirteen States, not embracing the two of greatest population, there were returned ten deaf, dumb and blind; fifteen deaf and blind; one deaf, dumb, blind, and insane; four deaf, dumb, blind, and idiotic; ten dumb and blind; one blind, deaf, and insane; and one idiotic, blind, and dumb; in all, forty-two returned as deaf and blind, or dumb and blind, in less than half the States.

Either the proportion of persons thus fearfully afflicted is less than it was, or the returns of the last census are not so full. We find in all the States, in 1860, twenty-four white persons returned as deaf, dumb, and blind, or dumb and blind; and fourteen as deaf and blind. To these are to be added two free colored (one of them returned as 100 years old, deaf and dumb, blind, and insane,) and sixteen slaves, three of the latter in one county in Tennessee, (Haywood.)

Most of those thus returned are elderly people, who will probably, in a few years, be relieved of their triple affliction by death. Others are persons who, probably, before becoming blind, acquired some mode of communication with their friends, available to the blind. It is well known that the educated deaf and dumb can converse in the dark, both by signs and by the manual alphabet, each mode of communication being sensible to the touch; and the same means remain available to those deaf mutes, on whom may fall the dreadful additional misfortune of blindness.

Even where the individual has become deaf and blind in infancy or childhood, if of good natural capacity, the case is not beyond the hope of great alleviation by instruction. Julia Brace can converse, in signs, on all the subjects connected with her daily wants, or even with the incidents that occur in the circle of her acquaintance. Laura Bridgman, also deaf, dumb, and blind from her childhood, has acquired a mental and moral development, superior to that of very many who are blessed with sight.

Of those returned in 1860 as deaf, dumb, and blind, seven are under the age of twenty; namely, a girl of five, in Jefferson county, Wisconsin; a girl of eleven, in Marshall county, Virginia; a girl of twelve, in Edgefield district, South Carolina; a girl of seventeen, in Licking county, Ohio; a boy of sixteen, at Indianapolis, (returned as also "foolish;") a boy of seventeen, in Windham county, Connecticut; and a boy of eighteen, in Saline county, Illinois, (returned, also, as insane and paralyzed.) Five of the seven, it is presumed, are capable of instruction. Should similar cases be known to exist, of which no mention is made, the Superintendent of the Census will be thankful to have them communicated.

CAUSES OF DEAFNESS.

Some of the assistant marshals noted on their returns the causes of deafness; but not to such an extent as to supply inductions of much value. Several noted, in cases where there were more than one deaf mute in a family, that the parents were cousins. Quite a number of cases were hereditary. For those who became deaf after birth, the cause most frequently returned is scarlet fever. The "use of quinine" is given as the cause of deafness in several cases.

It is stated in a note to the remarks on the deaf and dumb in the Preliminary Report, (on the authority of H. P. Peet, LL.D.,) that, according to the present state of our knowledge of deaf and dumb

statistics, there appear to be in Europe generally, in a population of a million, 615 deaf mutes who are so from birth, and only 154 by disease or accident; while in the United States, the former class number 278 in a million, and the latter 222. Assuming that our returns are less accurate than the European, to the amount of one-fifth, there would be in this country, of deaf mutes from birth, 333 in a million, and of those accidentally deaf in infancy or childhood, 267 in a million. This greater tendency of children among us to accidental deafness may, perhaps, be ascribed to our more variable climate, the extremes of heat and cold being apt to produce those colds and gatherings in the head to which deafness is often ascribed, and likewise to influence the course of those eruptive fevers which are among the most frequent causes of deafness. By more enlightened treatment of children attacked by colds, fevers, inflammations, and especially scarlet fever and measles, the number of deaf mutes who are not so from birth, might doubtless, be materially diminished.

The very small liability of our population to congenital deafness, as compared with that of Europe, may be due, in part, to the fact that our women suffer much less from hardship, exposure, and anxiety, than the women of Europe; in part, that, as we have already noticed, our population is more mixed; made up largely from the more energetic portion of the population of the Old World; and, in part, perhaps, that marriages of relations, owing to the general dispersion of families, are less common in this country than abroad.

Of the causes that are supposed to influence the birth of deaf and dumb children, there are two that are wholly in our power to avoid; namely, the marriage of two congenital deaf mutes and the marriage of near relatives. If it were generally understood that both classes of unions ought to be discouraged, if not even legally prohibited, there would be fewer families afflicted with deaf and dumb children, and especially with several deaf mute children in each.

CASES OF SEVERAL DEAF MUTES IN ONE FAMILY.

One of the most noticeable facts in the statistics of deaf-dumbness is the frequency with which this affliction appears in several members of the same family. Dr. Peet, summing up nearly three thousand cases collected by the principals of three American schools, concluded that in this country, of the congenitally deaf, a large majority have deaf mute brothers and sisters.* In other words, when a deaf mute child is born in a family, the probability is that there may be another, if not more.

As many as seven, and even eight, deaf mute children in one family are sometimes recorded. There appear, from the census of 1860, to be several families in almost every State, containing from three to five deaf mutes each; but the number of such cases has not been ascertained. In Tennessee, about one-third of the deaf and dumb appear to be in families containing more than one. As the list only shows the cases where all the deaf mute children are still living, and resident at home, the real proportion of such cases in that State must be considerably larger than one-third. In some other States this proportion does not seem nearly so large.

DEAF-MUTE CHILDREN OF DEAF-MUTE PARENTS.

It is a matter of regret, that the census schedules could not have been framed to show the relationship of each member of a family to the head of the family. Among the investigations which such a feature of the returns would facilitate, is the interesting one: How many deaf mutes are living in the marriage relation, and of those how large a proportion have deaf-mute children?

The returns do not show whether two deaf mutes of the same name, in the same family, are brother and sister, or husband and wife. Nevertheless, a comparison of the census list with the reports of our institutions enables us to distinguish many cases, especially in New England, where sometimes only one, but oftener both heads of a family, are deaf and dumb. It is believed that there have been more marriages of deaf mutes in the northern States, and especially in New England, during the last thirty years, than in any other part of the world of like population. As we have seen that the proportion of deaf mutes in those States is diminishing, instead of increasing, there seems no ground for the apprehension expressed by some, that the frequency of such marriages would occasion

such an increase in the number of deaf mutes, that even legislative enactments might be necessary to prevent it. Those who have the greatest acquaintance with the statistics of the deaf and dumb, state that, though this infirmity is sometimes transmitted to a second generation, and very rarely to a third, hardly an instance can be cited in which it has run through four generations.

In several of the States, perhaps in most, we find families in which deaf-mute parents have deaf-mute children. In New England there are about a dozen such instances; in Pennsylvania, eight; in New Jersey, one; in New York, four or five. It is probable there may be forty or fifty such cases in the whole Union. The number of deaf-mute children in these families is very seldom more than from one to three. On the whole, it is probable that of nearly twelve thousand deaf mutes in the United States, less than one hundred are the children of deaf-mute parents. That this is not an overestimate, appears from the fact that we find only about twenty such children in New England; ten in New York; two in New Jersey, and eighteen in Pennsylvania; in all, fifty deaf-mute children of deaf-mute parents, among not far from 4,500 deaf mutes, several hundred of whom were married. In the southern and western States, the proportion of married deaf mutes seems to be less; but the returns themselves do not furnish the data for an exact calculation, and we want, for those States, the information that would enable us to supply the deficiencies of the census schedules.

From the Forty-Fifth Report of the American Asylum (Hartford, 1861) we learn the following facts: Within the past ten years, there have been three large conventions of educated mutes at the American Asylum, on occasions of so much interest, as to bring together nearly all living in the New England States, and many from New York, Pennsylvania, and Ohio. The whole number of different persons (deaf mutes) present on these several occasions, was five hundred and forty-seven; of these, three hundred and fifteen were single, quite a number of whom had lately graduated; and two hundred and thirty-two were married. From this, it would appear that nearly half of the more intelligent and energetic class of educated deaf mutes become heads of families.

These two hundred and thirty-two married deaf mutes, who were present at the conventions referred to, formed, with twenty-eight others who were not present, one hundred and fifty-four families. Of forty-eight of these families one of the partners only was deaf and dumb, and both husband and wife were deaf and dumb in one hundred and six. There were one or more children in one hundred and thirteen of those families, and none in the other forty-one. In five of the latter, marriage had recently been contracted. The whole number of children reported as belonging to these families was two hundred and eighty-seven. Of these, two hundred and sixty-four were in possession of all their senses, and twenty-three were deaf and dumb. These twenty-three belonged to twelve families, the largest number in one family being five. In nine of these twelve families both the parents were congenital deaf mutes; and most of them also had near relatives deaf and dumb. In two other families the mother only was deaf from birth, the father having become deaf in childhood. In the remaining family the mother also was born deaf, and had two deaf-mute brothers; the father could hear and speak.

No instance is known to the principal of the American Asylum, in which the union of a couple, both of whom were accidentally deaf, or of a deaf mute not such from birth with a hearing person, had produced deaf-mute children.

The general result of the experience of this large number of deaf mutes is thus summed up:

Where two persons, both deaf mutes from birth, marry, there will probably be one or more deafmute children in more than half the families thus formed; and every three children out of eight born of such parents will probably be deaf and dumb. When a person, deaf mute from birth, marries either a hearing person or one deaf from accident, there will be deaf-mute children in such families in about one case in sixteen. Persons who became deaf by accident are not, unless they marry congenital deaf mutes, more liable to have deaf-mute children than persons who hear and speak.

LEGAL RIGHTS AND RESPONSIBILITIES.

In view of the large number of deaf mutes in the country, their "legal rights and liabilities" becomes a subject of general interest. As is stated in the Preliminary Report, the Roman law placed

this class of persons in a state of perpetual pupilage; and the influence of this principle, unjust as it is in many cases, even to the uneducated deaf and dumb, has led European jurists, down to a very recent time, to question the ability of a deaf mute to make a will or a contract, or even to form a valid marriage. These prejudices, however, are giving way to more just and rational views, and it is now almost universally held, that the deaf and dumb possess, if they show themselves of sufficient intelligence, all the rights of their brethren who hear and speak; like them, capable of acquiring or alienating property, making contracts, voting at elections, contracting marriage, and making wills; and, like them, are amenable to the laws. On this subject, the best and most complete treatise extant is probably that "On the Legal Rights and Responsibilities of the Deaf and Dumb," by Harvey P. Peet, LL.D.

As the deaf and dumb, the blind, and the insane, form a considerable and very interesting portion of the living population, we have devoted to them more space than their proportionate numbers might seem to demand, in which we feel justified, because their interests cannot be represented to the public generally through any other medium, while they, more than others, have a claim upon the State. We believe that such as will peruse what has been presented on these subjects, will not complain of the space they occupy. In order to complete the article, as far as our information up to the present time will admit, we have pursued the subject in the Appendix, so as to embrace some account of the persons who have entitled themselves to mention by their efforts and writings, not only to instruct the present age, but as an encouragement to the benevolent in the assurance it furnishes, that the memory of good deeds survives their performance.

Institutions for the education of the deaf and dumb in the United States, 1863.

	Title.	Location.	State.	Foundation.	Date of open- ing.	Principal or superinten a - ent.	No. of pupils at
1 1	American Asylum.	Hartford	Connecticut	Corporate and State.	1817	Collins Stone	22:
2	New York Institution	New York city	New York	Corporate and State.	1818	Harvey P. Peet, LL.D	31
3	Pennsylvania Institution	Philadelphia	Pennsylvania	Corporate and State.	1820	Abraham B. Hutton	18
4	Kentucky Institution	Danville	Kentucky	State	1823	John A. Jacobs	10
5	Ohio Institution	Columbus	Ohio	State	1829	George L. Weed, jr	15(
6	Virginia Institution for Deaf and						
	Dumb and Blind	Staunton	Virginia	State	1839	J. C. M. Merillat, M. D.	83
7	Indiana Institution	Indianapolis	Indiana	State	1844	Thomas MacIntire	143
8	Tennessee Institution	Knoxville	Tennessee	State	1845	A. G. Scott	61
9	North Carolina Institution, Deaf and						
	Dumb, and Blind	Raleigh	North Carolina	State	1845	Willie J. Palmer	41
10	Illinois Institution	Jacksonville	Illinois	State	1846	Philip G. Gillett	201
11	Georgia Asylum	Cove Spring	Georgia	State	1846	William D. Cooke	35
12	South Carolina Institution, Deaf and			. •	!		
	Dumb, and Blind	Cedar Spring	South Carolina	State	1849	N. P. Walker	20
13	Louisiana Institution, Deaf and]	
-	Dumb, and Blind	Baton Rouge	Louisiana	State	1852	A. K. Martin	63
14	Missouri Institution	Fulton	Missouri	State	1851	William D. Kerr	66
1 5	-Wisconsin Institution	Delavan	Wisconsin	State	1852	J. S. Officer	69
16	Michigan Asylum, Deaf and Dumb,					[
	and Blind	Flint	, ,	State,	1854	Barnabas M. Fag	75
1.7	Iowa Institution	Iowa City	Iowa	State	1855	William E. Ijams	50
18	Mississippi Institution	Jackson	Mississippi	State	1856	Joseph H. Johnson	20
19	Texas Institution	Austin	Texas	State	1857	Jacob Van Nostrand	27
20	Columbia Institution, Deaf and						
	Dumb, and Blind	Washington	District of Columbia		1857	Edward M. Gallaudet	35
21	Alabama Institution	Talladega	Alabama	State	1858		20
2 2	California Institution, Deaf and						
	Dumb, and Blind	San Francisco	California	State	1860	Mrs. P. B. Clark	21
•	<u> </u>	<u> </u>	1	<u> </u>]-	<u> </u>	

In those institutions where the blind are taught, only the number of their deaf and dumb pupils is given in the last column.

Besides the foregoing, an institution has recently been opened in Kansas, and measures have been taken to found one in Minnesota.

No intelligence having been received for two years past from the institutions in the revolted States, the table only gives for those institutions the *status* according to the last advices before 1861. The pupils in several of the northern institutions have rather diminished since 1860, deaf-mute lads, in some cases, being kept at home to supply the place of a father or brother absent in the army.

The annexed table of institutions for the deaf and dumb, in Europe and British America, is chiefly taken from a table prepared by Dr. Peet, after his European tour, in 1851. In only a few cases have we later intelligence from the trans-Atlantic institutions.

Statistical view of all the known institutions for the deaf and dumb in Europe, British America, and Asia.

	Institutions.	Founded.	Kind, or how supported.	No. of instruc- tors.	No. of pupils.
	I. GREAT BRITAIN.				
1	London	1792	Subscriptions	14	2 80
2	Birmingham	1814	Subscriptions	5	63
3	Manchester	1824	do	5	81
4	Doncaster	1829	do	4	90
5	Liverpool	1825	do	3 5	5 8
G	Exeter	1827	do	3	48
7	Newcastle	1839	do	2	30
8	Rugby	1844	Private.		
9	Brighton	1841	Subscriptions	2	40
10	Edinburgh	1810	do	ž.	70
11	Edinburgh	1849	Donaldson Hospital	2	40
12	Glasgow	1819	Subscriptions	3	85
13	Aberdeen	1819	do		26
14	Dublin, (Claremont)	1816	do	6	120
15	Dublin.	1825	do		8
16	Belfast	1831	do		50
17	Cork Swansea	1823	Private	1	14
18	Swansea		Subscriptions		
	II. FRANCE.				
19	Paris	1800	National	12	170
20	Bordeaux	1760 1786	do	12	110
21	Marseilles	1819	Department	4	60
22	Marscilles	1840	do	1 :	17
23	Toulouse .	1826	do	i 1	70
24	Albi	1020	do	. 1	35
25	Le Puy	1827	do		30
26	Le Puy	1840	do	'	20
27	St. Etienne.	1815	do		20
28	St. Etienne	1828	do		60
29	Lyons	1824	do	4	60
30	Grenoble		do		15
31	Vizille		do:		15
32	Bourg				
33			do		
34			do		14
35	Chaumont		do		32
36	Rodez		do		50
37	Aurillac		do		
38			do		25
	Loudun		do		30
	Pont-Achard		do		•••••
	Nantes		do		30
	Auray		do		30
43	Laval	1820	do		15 40
**	muguto	1/00	, UU	••••••	40

INTRODUCTION.

Statistical view of all the known institutions for the deaf and dumb in Europe, &c.—Continued.

	Institutions.	Founded.	Kind, or how supported.	No. of instruc- tors.	No. of pupils.
45	Nogent-le-Rotrou		Department		30
46	Lamballe.		do		29
47	Caen	1816	do		127
4 8	Rouen		do	1	23
49	Besançon	1824	do	1 1	47
50	Besançon	1	do		50
51	Orleans		do		25
52	Orleans	1	do		25
53	Strasburg	1825	do	3	33
54	Nancy	ı	do		71
55 I	St. Medard-les-Soissons	1017	do		50
56	Arras Lille		do		20
57 58	Lille	1	do		35
59	Vericelle	į.			40 10
60	Villedieu		do		10 15
61	Pont l'Abbe	1	do		25
VI	III. ITALY.				20
62	Rome .	1789	Papal	8	00
63	Naples	1786	Royal	4	90 50
64	Sienna	1828	do	4	40
65	Genoa	1801	do	5	83
66	Turin	1834	Private	1	5
67	Modena	1823	Government	3	22
68	Milan	1805	do	4	45
69	Villanuova	1832			11
70	Verona		Private	2	14
71	Ferrara .		do	1	3
72	Bologna		Day school	1	16
,	IV. SWITZERLAND.				
73	Geneva		Subscription	2	20
74	Iverdon	1810	Canton	2	20
75	Brunnader	1843	Private	2	34
76	Frienisberg	1822	Canton	5	60
77	Einsiedeln	1834	Private		7
7 8	Zurich	1826	Subscription	3	30
79	Werdenstein	1834	Canton	2	25
80	Zofingen	1838	Subscription	3	14
81.	Aarau	1835	do	2	13
82	Riehen V. Austria.	1838	do	4	33
		١.			
83	Vienna	1779	Imperial	4	75
84	Lintz	1812	Subscription	1 1	45
85	Brunn	1829	Private	1	10
86	Prague	1786	Subscription	4	54
87	Waitzen	1802	do	4	30
88	Brixen	1830	Provincial		15
89	Lemberg Gratz	1830 1832	Subscription Provincial	1	15
90 91	Salsbürg	1831	Private	1	15 4
92	Halle	1001	Fivace		. 4
34	VI. PRUSSIA.	,			• • • • • • • • • • • • • • • • • • •
93	Berlin	1788	Royal	6	00
	Stettin	1838	Provincial	1	80 14
94	NUCLULA TO A TOTAL	1 2000		-	
94 95	Stralsund	1837	Private) 11	. 7
94 95 96	Stralsund Konigsberg	1837 1820	Private Royal	1 3	7 32

Statistical view of all the known institutions for the deaf and dumb in Europe, &c.—Continued.

	Institutions.	Founded.	Kind, or how supported	No. of instruc- tors.	No. of pupils.
98	Marienburg	1833	Provincial		30
99	Posen	1830	do	2	20
100	Breslau	1804	Subscriptions	5	20
101	Liegnitz	1000	Private		20
102 103	Ratibor Madgeberg	1836 1829	Subscriptions Provincial	2	13 12
103	Weissenfels	1829	do	3	12 25
105	Erfurt	1829	do	3	32
106	Halberstadt	1829	do	2	13
107	Eisleben	1833	do	1	10
108	Heiligenstadt	1840		\	
109	Munster	1820	Royal		
110	Soest	1831	Provincial	1	18
111	Bueren	1831	do	1	14
112	Cologne.	1829	Subscriptions Provincial	4	52
113	Moers.	1836 1840	do	2 2	25
114 115	Kempsen Langenhorst.	1841		1	20 8
116	Halle	1834	Private	4	30
117	Aix-la-Chapelle	1838	do	1	15
	VII. BAVARIA.				
118	Munich	1798	Royal		
119	Bayreuth	1821	110741		•••••
120	Bamberg				
121	Anspech	1823	United with Poland. (Common schools)		18
122	Wurtsburg	1821	,		
123	Nurenberg	1831]	1	
124	Frakenthal	1824	Provincial	2	23
125	Di llingen	1834	do		10
126 127	Straubing	1832	do		15
	VIII. WURTEMBURG AND BADEN.		•		
128	Gmund	1807	Royal	4	33
129	Esslingen	1823	With normal schools	1	10
130	Vienneden	1825	Private	2	30
131	Tubingen	1829	do	1	14
132	Wilbelmsdorf	1837	do	1	14
133	Pfortzheim	1826	Ducal	5	90
	IX. SAXONY, HANOVER, AND OTHER GERMAN STATES.				,
134	Leipzig	1778	Royal	5	60
135	Dresden	1828	State and subscriptions	6	58
136	Hildesheim Weinar	1829 1824	Royal State	3	40
137 139	Weinar Eisenach	1829	do	1	3 11
139	Freidberg	1820	Ducal	2	30
140	Bensleim	1839		~	20
141	Homberg			2	25
142 143	Camberg	1819	State	3	68
143	Brunswick	1829	Stato	3	50
145	Wildeshausen	1020	do	1	- 9
146	Habstahl	1842	With normal school	1	5
147	Emden	1844	Government and subscriptions		12
148	Altenburg	1838	Private	1	5
149	Coburg	1835	State		
150					
151	Klausthal			l	

Statistical view of all the known institutions for the deaf and dumb in Europe, &c.—Continued.

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Marie and Section 1	Institutions.	Founded.	Kind, or how supported.	No. of instruc- tors.	No. of pupils.
152 153 154 155	X. GERMAN FREE CITIES. Frankfort Hamburg Bremen Lubec XI. BELGIUM AND HOLLAND.	1829 1827 1827 1839	City Subscriptions Private Subscriptions	3 2 2	8 18 16
156 157 158 159 160 161 162 163 164 165	Brussels. Brussels. Ghent Ghent Liege Bruges. Moorslede Mons Groningen Herlaar Rotterdam.	1820 1831 1834 1790 1840 1853	Government do d	3 4 6	28 09 49 35 87 161 16 59
167 168 169 170	XII. DENMARK, SWEDEN, AND NORWAY. Copenhagen Schleswig Stockholm Drontheim Christiana XIII. RUSSIA AND POLAND.	1807 1799 1808 1824 1844	Royaldododo	G 4 4	80-100 94 70 32
172 173 174	St. Petersburgh Warsaw • dessa XIV. British America.	1806 1817 1849	Imperial		97 48 18
175 176 177 177	Halifax, N. S. Montreal, C. E. Torento, C. W. XV. Asia. Smyrna Calcutta.	1			59

THE BLIND

To the popular mind, the loss of sight seems to be, next to the loss of reason, the greatest of misfortunes. We live and move in a world of light, a condition to which the eye is wonderfully adapted. The destruction of this organ shuts out all that is beautiful and sublime in nature—all that is dear and expressive in the human countenance. Facility of moving about is interrupted; full recourse to books and libraries is denied; the ordinary pursuits of business are closed, and the blind are often subjected to a life of dependence and poverty.

While all these privations must be admitted, yet the blind, especially the educated, are not an unhappy people. On the contrary, they are cheerful, and with genial occupations and a comfortable support, are contented and even happy. Though "it is a pleasant thing for the eye to behold the sun," and we instinctively associate darkness with gloom, yet this is not the effect upon the born blind, or those who have been long in that condition. But this happy relief is found only or chiefly in that beautiful law of compensation which a merciful Providence has connected with this affliction, trained and developed by special systems of education. By this law, the lost sight gives increased power and sensibility to all the remaining senses. Touch and hearing perform a large share of the work of conveying to the mind a knowledge of external things. The blind child feels and discovers the shapes of all objects, their qualities of smoothness, roughness, and consistency, and soon associates the names which curiosity prompts it to inquire after. Such a child may be taught a thousand things through its touch and hearing; and its tenacious memory, constantly exercised, rarely parts with them. The blind find a happy compensation in their love of music, which is largely cultivated by them. The kind voice of affection, the murmuring brook, the forest winds, the warbling of the birds, and all the many voices of nature, are to them sources of intense delight. From their fondness for country rambles among picturesque scenery, and the surrounding beauties which their excited imaginations picture upon their mental vision, it would be difficult to doubt that they receive in such a presence, the pleasure which the most romantic lover of nature enjoys. But the highest and most satisfactory compensation the blind receive, is that derived from the training and instruction in religion, literature, music, and the mechanic arts, pursued in the institutions founded for their benefit, They are here taught to read the Scriptures, and other valuable books are brought within their reach. They acquire habits of thought and discipline, and receive a knowledge of the practical duties and relations which fit them for active life.

Can the blind distinguish colors by touch? is a question sometimes discussed. The affirmative is asserted by Monsieur Guille, Dr. Bull, and others, who refer to cases, and an instance is recorded in the Philosophical Transactions of Great Britain. The extreme sensibility of the touch of the educated blind, which enables them to read the raised print with facility, and even to thread a fine needle with the aid of tongue and lip, naturally favor the belief of marvellous stories of this kind. Those in charge of the London Asylum for the Blind, and of the older institutions in the United States, who have had very favorable opportunities for testing such a question, have no evidence whatever of the power of the blind to distinguish natural colors by the touch. The most they are prepared to admit is, that the chemical or other change produced by the coloring matter on a cloth fabric, may so affect the surface as to cause more or less harshness, distinguishable by the extremely delicate touch of the blind; but this is entirely different from distinguishing color as such. Mr. Chapin has repeatedly tested the subject, selecting those who were most remarkable for tactile sensibility, but without any result.

CAUSES OF BLINDNESS.

Blindness is congenital in many cases; but it results in a much greater degree from disease, accident, and old age. Among the principal inducing diseases may be named amaurosis, or paralysis of the optic nerve, cataract, purulent ophthalmia, scarlet fever, scrofula, small-pox, measles, and accident.

Hereditary blindness (that is, strictly derived from blind parents) is not frequent. Of 700 blind persons in the institutions of the United States whose parentage is known, only five had either parent blind. An investigation made some years since in the Hôpital des Quinze-Vingts, at Paris, revealed the remarkable fact that of the several hundred children born there of parents, one or both of whom were blind, there was not a blind child among them.

Blindness, in common with idiocy, insanity, deafness, and other mental and physical evils, often from intermarriages of first cousins, of uncles and nieces, and other relatives. All our public institutions contain such persons, and all medical experience abundantly demonstrate this important fact

The extraordinary exemption from blindness in the United States, as compared with Great Britain and Ireland, according to the census returns, which give the latter about two and a half times more blind than the former country, can perhaps only be attributed to the greater prevalence of small-pox, which has been a prolific cause of blindness in Great Britain and Ireland. Dr. Crompton, of Manchester, England, estimated that between 4,000 and 5,000 were blinded by small-pox in Great Britain and Ireland out of a blind population of 28,450 in 1841,* or about one-sixth of the whole number. The number of blind from this cause in the United States is not ascertained, but the statistics of some of the institutions will throw light upon the subject.

Of 1,456 blind persons received into the Liverpool School for the Blind from 1791 to 1860, 250, or more than one-sixth, became blind by small-pox, being the same proportion as is assumed by Crompton. Of the pupils in the Glasgow Asylum, nearly one-fifth were blinded by small-pox. In the Pennsylvania Institution, of 476 pupils received to the year 1863, only 21, or $\frac{1}{22}$ of the whole, lost their sight by small-pox. In the Ohio Institution up to a certain date, of 118 pupils received, only one was blinded by small-pox. Combining the two, and taking an average ratio of the present number of blind, and there would be only about 225 blind in the United States, made so by small-pox. Accurate data from each institution would enable us to make a near approximation, proving the greater prevalence of vaccination in this country.

HISTORY.

The first regularly organized establishment, for the charitable relief of the blind, is known as the Hôpital Impérial des Quinze-Vingts, in Paris. It was founded by St. Louis, in 1260, as an asylum for his soldiers who had lost their sight in the East. It was designed, as its name implies, for fifteen score, or 300 blind; but it contains, at the present time, about 800 persons, including their families, for they are permitted to marry. No instruction of any kind is imparted to its blind inmates.

Although something had been done by ingenious blind persons and others to overcome the privation of sight by various contrivances, which substituted the touch of the finger for the lost sense, the first successful effort in systematic instruction was made in Paris by Valentin Haüy. Inspired by the success of the Abbe de PÉpée in the education of the deaf and dumb, Haüy believed that equally happy results could be effected for the blind, who were regarded as more helpless. He reflected upon the remarkable delicacy of their touch, which was rarely deceived in distinguishing the different coins; and it readily occurred to him that letters formed and printed in relief might also be traced by them. This was accordingly done; maps with raised boundaries, rivers, &c., were made; a class of blind children was collected and instructed, and the experiment was entirely successful. Such was the simple basis of the system which has been followed, with many improvements, in most parts of the civilized world.

A house was procured in 1784, in Paris, under the patronage of the Philanthropic Society; the school was organized under the immediate charge of Haüy. In 1786, he gave an exhibition of the attainments of his twenty-four pupils, before the King and royal family, at Versailles, when the institution was placed on a more permanent foundation by the royal bounty.

^{*} Assuming the same ratio of blind to the whole population as in 1851; no census of the blind was taken in Great Britain previous to 1851.

In 1791 the "Liverpool School for the Blind" was founded, which was the first of the kind in Great Britain. Others rapidly succeeded, as the tables will show.

STATISTICS. Institutions for the blind in Great Britain and Ireland, the date of their foundation, and number of inmates.

No.	Location.	Founded.	Blind inmates.	No.	Location.	Founded.	Blind inmates.
1	Liverpool	1791	80	17	London, ("London and Blackheath Institution")	1838	
2	Edinburgh	1792	115	18	Exeter	1838	26
3	Bristol		59	19	Aberdeen	1838	30
4	London, ("School for the Indigent Blind")	1799	148	20	Dundee	1838	
5	London, ("Jewish Asylum for Indigent Blind")	1801		21	Bath, (deaf and dumb and the blind)	1840	24
6	Norwich	1805	36	22	Brighton	1841	21
7	Dublin, ("Richmond," for males)	1809	20	23	Nottingham	1842	30
8	Dublin, ("Molineaux," for females)	1815	35	24	Birmingham		59
9	Glasgow		110	25	*Plymouth		
10	Belfast, ("Ulster," for deaf and dumb and blind)	1831	13	26	*Edinburgh, (Abbey Hill)		
11	Yorkshire	1835	60	27	*Dublin, (Catholic)		ı
12	Limerick, (for females only)		12	28	*London, (Milton Institution)		
13	Manchester, (Henshaw's)	1838	75	29	Cork		32
14	Newcastle-upon-Tyne	1838	41	30	Leamington		
15	London, ("Society for Teaching the Blind to Read")	1838	56				
16	Liverpool, (Catholic, for females only)		17		Total in 22 of the above institutions		1,099

^{*} Schools and asylums of small size, dates and numbers not ascertained.

ASSOCIATIONS AND SOCIETIES FOR THE RELIEF OF THE BLIND IN GREAT BRITAIN.

- 1. Rev. W. Hetherington's Charity, founded 1774. It empowers the governors of Christ Hospital, to pay annuities of £10 each, to 50 blind persons over sixty years of age. Through the gifts and bequests of other benefactors, 600 blind men are relieved annually by Christ Hospital.
- 2. The Painters' and Stainers' Company, (1780,) from the bequests of certain persons, relieve 171 blind pensioners over sixty-one years of age. The sum invested for this purpose is £65,379.
- 3. The Cordwainers' Company distributes pensions of £5 per annum to 105 blind persons, under the will of John Came, 1797.
- 4. The Clothworkers' Company, from several bequests, relieve by annual pensions 375 blind persons, and distribute in a single year the large sum of £2,325.
- 5. The Blind Man's Friend, or Day's Charity, founded by the late Mr. Charles Day, was commenced in 1839. Mr. Day left the sum of £100,000 for the benefit of persons over twenty-one, suffering under the affliction which he had himself experienced—"the deprivation of light." In 1860, 240 blind persons received £3,528, in sums varying from £12 to £20 each.
- 6. Association for Promoting the General Welfare of the Blind. The object, is to supply the adult blind with employment, and also to instruct them in trades. It has six branches in other parts of the kingdom; commenced in 1854. The association purchases the raw material at wholesale prices, and furnishes it at a low rate to workmen by retail. A deficit of some \$800 a year is supplied by subscriptions. About 150 blind men and women are thus assisted, and a large number are waiting to be admitted.
 - 7. Society for Printing and Distributing Books for the Blind, 1854.
 - 8. Indigent Blind Visiting Society, 1837.
 - 9. Christian Blind Relief Society, 1843.

- 10. Society for Supplying Home Teachers.
- 11. Society for Improving the Social Position of the Blind.
- 12. The Drapers' Company distributes pensions of £10 each, to a small number of blind persons.
- 13. The Goldsmiths' Company distributes pensions of £4 and £20 per annum to 15 blind persons, under the wills of two individuals.
 - 14. The Society for Granting Annuities to the Blind.

All the above associations are in London. The object in all cases, except one, is to afford stated annual pensions for the relief of blind persons of good character, and in needy circumstances. The societies are the almoners of the pensions, thus provided, by the gifts and bequests of benevolent persons. No association of this nature, exists in the United States.

Institutions for the blind, on the continent of Europe.

							-
No.	Location.	Founded.	No. of blind.	No.	Location.	Founded.	No. of blind.
1	Paris, (Hôpital Imperial des Quinze-Vingts)	1260	300	38	Konigsberg, Prussia	1846	. 39
2	Paris, (Imperial Institution for the Young Blind)	1784	190	39	Paris, France, (Asylum de St. Hilaire; day school).	1846	
3	Vienna, Austria, (Imperial Institute)	1804	48	40	Palermo, Italy	1850	
4	Amsterdam, Holland	1804	55	41	Vienna, Austria, (House of Labor for the Adult		
5	St. Petersburg, Russia	1806	45		Blind)	li	60
3	Berlin, Prussia	1806	30	42	St. Med. les Soissons, France, (deaf and dumb and	(
7	Manheim, Baden	1806	36	1.0	blind)		
8	Dresden, Saxony	1809	96	43	Stettin, Prussia	1851	24
9	Zürich, Switzerland	1809	20	44	Lille, France, (for girls).		10
10	Copenhagen, Denmark.	1811	45	45	Lille, France, (for boys)	1853	15
11	Brunn, Austria, (training)	1813	25	46	Berne, Switzerland	1	
12	Breslau, Prussia.	1816	52	47	Friburg, Switzerland.		36
13	Pesth, Hungary	1816	0~	48	Stuttgart, Würtemburg		
14	Stockholm, Sweden	1817	}	49	Rodez, France, (deaf and dumb and blind)		
15	Naples, Italy	1818		50	Posen, Prussia		
16	Barcelona, Spain	1820	75	51	Wolstein, Prussia		
17	Gmund, Würtemburg	1823	75	52	Magdeburg, Prussia	1853	
18	Linz, Austria	1824		53	Bologna, Italy		
19	Lisbon, Portugal	1001		54	Weimer, Weimer		
20	Friesing, Bavaria	1828		55	Puys-de-Dôme, France, (for girls)		10
21	Munich, Bavaria			56	Warsaw, Russian Poland		
22	Bruchsal, Baden	1828		57	Milan, Sardinia		
23	Hamburg, Germany	1830		58	Gatschina, Russia		
24	The Hague, Holland.	1		59	Marseilles, France	ſ	
25	Brabant, Holland.			60	Poictiers, France		8
26	Antwerp, Belgium	1	1	61	Christiania, Norway		2
27	Bruges, Belgium			62	Wiesbaden		9
28	Constantinople, Turkey			63	Rome, Italy	1001	
29	Turin, Sardinia.			64	Ilzach, Haut Rhin, France		
30	Brussels, Belgium	1	12	65	Schaffhausen, Switzerland		
31	Brunswick, Brunswick	F	16	66	Düren, Prussia.		
32	Liege, Belgium.	1	10	67	Halle		
33	Frankfort-on-the-Main			68	Metz, France	1 -	1
34	Hanover, Hanover	1	37	69	Berlin, (Industrial Asylum for Adult Blind)		
35	Madrid, Spain.	1	25	70	Amsterdam, Holland, (Asylum for Indigent Blind).		
36	Padua, Italy		1 -3	71	Vaugirard, France, (Sisters of St. Paul)		
37	Lausanne, Switzerland		57	72	Paris, (Little Blind Brothers of St. Paul)		
			1			}	}

Institutions for the blind in the United States, with the number of pupils and blind persons employed by them.

No.	Location.	State.	Founded,	No. of pupils and blind employed.	1	Location.	State.	Founded.	No. of pupils and blind employed.
1	Boston	Massachusetts	1833	111	14	Macon	Georgia	1851	31
2	New York	New York	1833	158	15	Baton Rouge, (deaf and			
3	Philadelphia		1833	180	ľ	dumb and blind)	Louisiana	1852	14
4	Columbus	Ohio	1837	120	16	Jackson	Mississippi	1852	10
5	Staunton, (deaf and dumb	. 444			17	Iowa City	Iowa	1853	40
	and blind)	Virginia	1838	44	18	Baltimore	Maryland	1853	25
6	Louisville		1842	42	19	Flint	Michigan	1853	35
7	Nashville	Tennessee	1844	36	20	Austin	Texas	1856	12
8	Raleigh, (deaf and dumb				21	Washington, (deaf and	` .		
	and blind)		1845	18	ľ	dumb and blind)		1857	6
9	Indianapolis		1846	80	22	Little Rock	Arkansas	1859	10
10	Jacksonville	Illinois	1847	64	23	San Francisco, (deaf and			
11	Cedar Springs		1848	17		dumb and blind)	California	1860	20
12	Janesville		1850	46		Total			1, 151
13	St. Louis	Missouri	1851	32					-,101

Proportion of blind persons in the several States, and to the whole population in the United States.

States.	Free, blind.	Slaves, blind.	Free, one in—	Slaves, one in—	States.	Free, blind.	Slaves, blind.	Free, one in—	Slaves,
Alabama Arkansas California Connecticut Delaware Florida Georgia Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland	204 118 63 152 42 15 297 476 530 192 10 530 112 233 264		2,594 2,749 6,032 3,027 2,629 5,245 2,003 3,617 2,548 3,516 10,711 1,755 3,365 2,696 2,272	3,816 4,273 2,940 2,458 2,811 2,564	New Jersey New York North Carolina Ohio Oregon Pennsylvania Rhode Island South Carolina Tennessee Texas Vermont Virginia Wisconsin District of Columbia Dakota Territory	208 1,768 392 899 9 1,187 85 171 437 119 165 557 220 47	189 120 117 30	3, 2:30	1,751
Massachusetts	498 254		2, 472 2, 595		Nebraska Territory New Mexico Territory	3 146			
Minnesota	23		7,044		Utah Territory	17			
Mississippi Missouri New Hampshire	147 388 142	116 60	2, 413 2, 727 2, 296	3,764 1,915	Washington Territory Total	2 11, 122	1,509		

RECAPITULATION.

Proportion of blind, white, and free colored, to the whole, one in	2,468
Proportion of blind slaves to all slaves, one in	2,610
Proportion of all the blind to the whole population, one in	

For the sake of comparisons, the following statistics of the blind in Europe are added.

According to the British census of 1851, the whole number of blind persons in Great Britain and Ireland was 29,074, viz:

In England and Wales		 18, 306,	being 1 in 979
Scotland		 3, 010,	being 1 in 960
	Sea		J
Total in Gre	at Britain	 21, 487,	being 1 in 975
Ireland		 7, 587,	being 1 in 878
Total in Gre	Total in Great Britain and Ireland	 29, 074,	being 1 in 950

A larger proportion of blind persons, is found to exist in the agricultural districts of Great Britain, than in the manufacturing and mining districts and large cities. There is—

In London	1 blind to every 1,025 persons.
Birmingham	
Leeds	
Sheffield	

The British census of 1851 gave some important facts in regard to the ages of the blind. Of the 21,487 blind persons in England, Scotland, and Wales, there were—

```
      Under 20 years of age, only
      2, 929, or 14 per cent.

      Between 20 and 60
      8, 456, or 39 per cent.

      Over 60
      10, 102, or 47 per cent.
```

showing that nearly one-half were at the advanced age of sixty and upwards, while about one-seventh, only, were under twenty years of age.

The United States census of 1860, which for the first time exhibits a classification of the ages of blind persons, shows somewhat similar results:

		•	•			•
	Under 10 years.	10 to 20.	20 to 40.	40 to 60.	Over 60.	Total.
White Free colored Slave	\$	1,494 30 124	2, 381 55 250	2, 429 106 325	3, 641 202 699	10,708 414 1,509
	895	1,648	2, 686	2,860	4,542	12,631

Table showing the number of blind in the United States, classified by ages.

This classification of the ages of the blind is extremely valuable to the institutions and asylums founded for their instruction and employment. They possess now, what they have never had, a reliable account of the numbers within certain ages, who may be eligible for instruction. And when the legislatures of the several States and those who direct and administer these institutions, find the number of a proper age for admission so much below all previous calculations, the work of providing for all the blind and placing them in a condition of self-support will cease to be very formidable. In this view, these tables are very encouraging.

In Prussia, (1831,) of 9,212 blind, 846, or nearly one-eleventh, were between the ages of one and fifteen. In Brunswick, of 286 blind, one-twentieth were under seven.

Comparative proportion of blind persons to the whole population in Europe and in the United States.

France, (census of 1836,) 24,675 blind	1	in	1, 357
Belgium, (1831)			
Level portions of the German States	1	in	950
More elevated portions of Germany			
Prussia	1	in	1,401
Switzerland	1	in	1,570
Sweden	1	in	1,091
Great Britain and Ireland, (1851,) 29,074 blind	1	in	950
United States, (1860,) white, 10,708 blind	1	in	2,519

The remarkable fact is shown in the foregoing table, that in proportion to population, the blind in the United States are less than two-fifths of the number in Great Britain and Ireland, and are less than three-fifths of the number in France.

The proportion of the blind in each of the United States to the population, considered in relation to geographical position or latitude, shows that whatever causes may have modified these ratios, climate has had little or no influence. The tables of Dr. Zeune, of Berlin, so much referred to as showing the proportions of blind persons according to latitude, the general correctness of which may well be doubted, are entirely inapplicable to the United States. According to those tables, the proportion is:

In latitude 20 to 30.	1 ir	ı 100
Latitude 30 to 40	1 ir	3 00
Latitude 40 to 50	1 in	a 800
Latitude 50 to 60	1 in	a 1,400
Latitude 60 to 70	1 i	n 1,000

The following contrary results appear in certain geographical sections of the United States:

In latitude 30 to 35, (Louisiana, Mississippi, Alabama)	1 in 3,037
Latitude 42 to 47, (Maine, Massachusetts, Michigan)	1 in 2,630

Large differences, from *other causes*, occur in the proportions of blind persons in some of the States. In Oregon, there is one blind to 5,829; California, one to 6,032; Minnesota, one to 7,044; Kansas, one to 10,711. These are distant and thinly populated States, to which few blind persons emigrate, and contain few aged persons, among whom a large portion of the blind are found.

ALPHABETS AND PRINTING FOR THE BLIND.

The blind, of necessity, read by the touch. The method of printing originated, as stated, with Haüy, in Paris, in 1784. Since then, various kinds of embossed alphabets and characters have been adopted. The alphabetical systems are known as the Roman capitals, as in the books of the Glasgow and Pennsylvania institutions; the combined capital and lower-case, as in books from the Bristol, Paris, and some of the German institutions; and the modified or angular lower-case of Dr. Howe, of the Massachusetts institution.

The arbitrary systems are known as Braille's, (dots,) of France; the Abbe Carton's, in Belgium; Lucas's and Frere's, (stenographic,) and Moon's. These consist of simple elementary lines and dots, combined to represent the letters of the alphabet. Moon's approaches nearer to the alphabetic form.

All these systems have their advocates. These arbitrary characters are not used at all in the United States, where the books of the Philadelphia and Boston letters are adopted. In Great Britain, Lucas's system is used at Bath, Exeter, and Nottingham, and in one of the London schools, where it is decidedly preferred. Moon's system has some strong friends among the blind, and is adopted in the institutions at Brighton, Edinburgh, and elsewhere. Frere's books are used in the Liverpool asylum and at

Blackheath. But the alphabetical system of Alston, printed at Glasgow, (the Roman capitals,) is adopted by nearly all the principal schools in the kingdom.

The principal advantage of the simple arbitrary characters is, they are easily distinguished by the touch. Some of the adult blind, whose touch is impaired by work, learn these characters where they fail in the others. This must be conceded in its favor.

But, on the other hand, well-founded objections exist against teaching the blind a system of characters different from the alphabet universally adopted by the seeing. The great expense of books in the arbitrary characters, is also a serious hindrance to their general use. For example, the New Testament is charged £1 16s. in Lucas's, £2 in Alston's, £4 17s. in Moon's; the Old Testament £8 1s. in Lucas's, £7 15s. in Alston's, and £11 11s. in Moon's, omitting Leviticus, Numbers, and Chronicles, the addition of which would swell the price to £13 10s. Comparing these prices with those of books for the blind in the United States, the greatest difference is found. The New Testament is furnished in the United States at \$5; the entire Bible, by the American Bible Society, at \$20—only half the price of Alston's. Other books are furnished, at prices greatly below the British rates.

As printing for the blind is very costly, and the books few in number and so greatly needed, it must be regarded as unfortunate that so much useless expense has been wasted upon these various systems, each duplicating what has already been printed by others. The Scriptures are printed in no less than four different characters, and three of these are sold at such dear rates, as to place them beyond the means of nine-tenths of the blind. Yet the zeal in this direction continues!

The following list embraces all the principal books printed for the blind, in the United States:

By the Perkins Institution and Massachusetts Asylum, at Boston, (in the modified lower-case letter,) the Old and New Testaments, in eight large volumes; a Cyclopedia, (unfinished,) nine volumes; Milton's Poetical Works, two volumes; Paley's Evidences, one volume; Lardner's Universal History, three volumes; Common Prayer, one volume; Pope's and Diderot's Essays, one volume; Pilgrim's Progress, one volume; Baxter's Call, one volume; Constitution of the United States, one volume; Guide to Devotion, one volume; English Grammar, one volume; Geography, one volume; Atlas of the Islands, one volume; English Reader, two volumes; Pierce's Geometry, one volume; Philosophy of Natural History, one volume; Natural Philosophy, one volume; Psalms and Hymns, one volume; Hymns for the Blind, one volume; Combe on the Constitution of Man, one volume; Vicar of Wakefield, one volume; and a number of elementary books.

By the *Pennsylvania Institution*, at Philadelphia, (in the Roman capitals,) a Dictionary of the English Language, in three large volumes; Select Library, five volumes; Church Music, three volumes; Student's Magazine, six volumes; A System of Music, (by Mahoney,) one volume; Psalms and Hymns, one volume; De Oster Eier, (German,) one volume; and several introductory books.

By the Virginia Institution, (in the Boston letter,) Peter Parley's History, three volumes; Book of Fables, one volume; French Phrases, one volume; History of Virginia, one volume; and several elementary books.

By the New York Institution, some volumes of Arithmetic, (Boston letter.)

A subscription list amounting to some \$30,000 or \$40,000 was obtained during two or three years past, by a blind gentleman, in the west and southwest, and part of the money paid in, to establish a *Printing-house for the Blind*, at Louisville, but it has not been put into operation.

GENERAL VIEW AND OBJECTS OF THE INSTITUTIONS FOR THE BLIND.

The great object of these institutions is to remove the disabilities under which the blind labor, by a system of instruction adapted to their condition. Books and all school apparatus, are prepared in relief, and the sense of touch is substituted for the lost sight. Combining these with oral instruction and moral and physical training, they receive all the advantages of our best schools. Without deciding how the mental and physical condition of the blind will compare with the general standard, it is demonstrated in the sense of the

strated that they have capacities for receiving a superior education, and also of becoming excellent church organists and piano instructors and tuners. While the cultivation of music is to them a source of the greatest delight, and is almost universally taught to the younger blind, as affording a benevolent compensation for the loss of all the visual beauties of nature, it is important to remember that the exercise of their industrial powers supplies to the great mass of the blind the highest necessity of their condition. The largest number become practical workers in some branches of useful handicraft. Occupation of mind and body, in all these respects, gives to the blind in the public institutions that tone of cheerfulness which is considered so remarkable in their condition.

The object, above all others, for which these institutions were founded, is to prepare the blind for self-support, and for the active duties and enjoyments of life. It was for this end that private bounty and legislative aid have been so earnestly invoked and so generously granted.

In Europe, thousands of blind persons who would be able, if instructed in simple trades, to earn a good portion of their support, are burdens upon their friends or the public. Many adult blind in the United States are in the same dependent condition.

It must be conceded that, notwithstanding the success of our institutions in imparting valuable literary and musical instruction, very few of them are fulfilling their mission towards the graduate and adult blind. Children with sight receive their education in the grammar and common schools, and are afterwards placed in the workshop or store, to learn the business which they expect to pursue. Not so with the blind. The shops of the mechanic and the tradesman are closed to them. The public institutions should comprehend in their whole policy, as far as possible, the future welfare of all the blind who are in a condition for industrial employment. However important it may be to educate them, it will afford little satisfaction if, after all, they are cast helpless upon the world, without any means of support but charity.

The work department must hold a higher relative place in all these institutions, and additional means of employment must be engrafted thereon, or separately organized, to realize the great idea of education and self-dependence on which they are founded.

Happily, this idea is a practical one to a very large extent. Handicraft employment is the substantial basis on which the comfort and support of the greater portion of the blind must rest. The difficulties in the way are more apparent than real, as revealed by the census.

The blind are comparatively few in number. The census returns of 1860 show that of the whole number of white blind, (10,708,) 4,868, or nearly one-half, are over 50 years of age. Adding those under 10, (763,) as too young to be received into the institutions, there remain, between the ages of 10 and 50, 5,077 to dispose of. Of this number it is fair to assume that there are in comfortable circumstances, and of the mentally or physically incompetent, at least 1,000; in existing institutions and graduates occupied elsewhere, about 1,800; leaving to be received and employed only about 2,277, for whom no provision seems yet to be made. To refuse admission into our institutions and workshops of adults between the ages of 20 and 50, must be regarded as a denial of justice and humanity. To this class, handicraft is the important instruction to be imparted. Without this, destitution, dependence, and deprivation of much happiness must be the inevitable general result.

If these views be correct, what may be proposed as the appropriate remedies? It is suggested:

- 1. That every existing institution for the education of the blind should be required by the State which supports it, to make handicraft a prominent branch of instruction.
- 2. That adults of good character, between the ages of 20 and 50, be admitted into such institutions for one, two, or three years, to learn handicraft, at the same charge to the State as younger pupils.
- 3. That private benevolence and legislative aid should encourage the organization of industrial departments for the instruction and employment of the adult blind, separately, or in connexion with existing institutions.
- 4. That such persons, and all others in indigent circumstances, receive, on leaving the institution, an outfit sufficient to cover the cost of machines and tools, to enable them immediately to commence work on their own account.

5. That where worthy and industrious blind persons, who have completed their course of instruction in existing institutions, have no homes to return to, and no prospect of success elsewhere, a home, or employment in full or in part, should be provided for them by the institution in the State where they belong.

There is much reason to hope that private benevolence, by gifts and legacies, will do much to secure the permanent foundation of homes and workshops for the industrious blind; but until then, let them be regarded as the *children of the State*. In a well-organized industrial establishment, they will be able to earn, on an average, three-fourths of an economical support. Without such means, a large number must fail, and the community must support them in idleness and sorrow. It is the true economy, therefore, to provide and encourage workshops for the blind. There are no more industrious people. They ask not alms, but employment; and each State eonsults its own true interest, as well as its humanity, in securing, for the common welfare, the industry of this class of its citizens.

The subject has thus far been treated only in its pecuniary aspect. But it has a higher relation. Occupation is, to the blind especially, a chief source of contentment. To abandon them to idleness is an aggravation of their misfortune, and too often leads to demoralization and pauperism.

While, therefore, our institutions are so eminently successful in the instruction of the blind in the various branches of literature and music, and in which many of them become excellent teachers, let the means be so extended that, with additional departments and auxiliary organizations of mechanical industry, fostered by State and private bounty, the crowning work may be accomplished of reaching every worthy eligible blind person in the country.—(See Appendix for conclusion.)

THE INSANE.

Table showing the number of insane, in the United States and Territories, according to the Eighth Census, 1860.

	INSA	NE.	GTATES AND TERRETORYES	insane.	
STATES AND TERRITORIES.	Free.	Slave.	STATES AND TERRITORIES.	Free.	Slave.
Alabama	225	32	North Carolina	597	63
Arkansas	82	5	Ohio	2,293	
California	456		Oregon	23	
Connecticut	281		Pennsylvania	2,766	
Delaware	60		Rhode Island	288	
Florida	20	5	South Carolina	299	18
Georgia	447	44	Tennessee	612	28
Illinois	683		Texas	112	13
Indiana	1,035		Vermont	693	
Iowa	201		Virginia	1, 121	58
Kansas	10		Wisconsin	283	
Kentucky	590	33	District of Columbia	204	
Louisiana	132	37	Dakota		
Maine	704		Nebraska	5	
Maryland	546	14	New Mexico	28	
Massachusetts	2,105		Utah	15	
Michigan	251		Washington	3	
Minnesota	25				<u> </u>
Mississippi	236	36		23, 593	406
Missouri		20		20,000	
New Hampshire	503				23,593
New Jersey	589				1
New York	4,317		Total		23,999

Of the obstacles which prevent a perfect return in regard to the various subjects comprehended in the Eighth Census, doubtless those which were encountered in the enumeration of the insane, and the idiotic, are greater and more nearly insurmountable than any others. Perhaps the greatest of them is that sensitiveness to public exposure which widely exists among persons who look upon mental alienation in a false light, regarding it as a humiliating, and often a special dispensation of Divine Providence, rather than as one of the numerous diseases which afflict the human race, and from the liability to an attack of which no one can claim exemption. Persons cherishing these views not unfrequently consider themselves justified in concealing a knowledge of the insanity of a relative, when the acknowledgment of it to the census-taker would, as they erroneously believe, lead to the publication of that relative's disorder, coupled with his name, in some official report.

Hence, although in the enumeration of the insane in the Eighth Census there is a much nearer approximation to accuracy and completeness than in either of those which preceded it, it is not claimed to be perfect, but merely such an advance towards perfection as furnishes reasonable assurance of still greater improvement in the future.

If we compare this census with those which have been taken in some of the States, under local legislative authority, it will be found more nearly perfect than them, with perhaps one exception. The census for 1855 of the State of New York gave returns of 2,742 insane, and 1,812 idiots; while the national census for 1860 gives 4,315 insane, and 2,314 idiots. Neither class could have so alarmingly increased within the short period of five years intervening between the two enumerations. From these facts, and from the opinions of medical men acquainted with the subject, we are convinced that of the two censuses in question, that of 1860 is the more nearly accurate.

On the other hand, the census of the insane and the idiots in Massachusetts, taken in the year 1854, was undoubtedly more nearly perfect than that included in the Eighth National Census. But the former was taken by a special commission, at the head of which was Dr. Edward Jarvis, well known to have been long engaged in the investigation of insanity, and in the treatment of the insane, who took measures for successfully avoiding or overcoming those obstacles which were insurmountable to the marshals of the national census. He derived his information chiefly from physicians, from 1,315 of whom, in a State containing but about 330 townships and cities, he received returns. Clergymen, overseers of the poor, selectmen, and superintendents of hospitals, and other receptacles for the insane, added their contributions, either increasing the numbers returned by the physicians, or furnishing a test for the accuracy of their returns. By these means it was ascertained that, in the autumn of 1854, there were, in Massachusetts, 2,622 insane persons, and 1,087 idiots. By the national census, nearly five years later, the numbers in that State were 2,105 insane, and 712 idiots. It is to be hoped that, for the next national census, some method of enumerating these classes, which shall be equally efficient with that pursued in Massachusetts, may be devised.

As insanity has become a subject not only of general interest, but of no small political and social importance, we feel assured that the introduction of a brief but compendious account of it will promote the great objects of the census, by stimulating the progress and improvement of an enlightened and philanthropic people.

Seat of insanity.—Inasmuch as mind can be perceived and studied in its manifestations alone, its essential nature cannot be understood. It is consequently impossible to reduce to a positive demonstration any answer to the proposition whether insanity is really a disease of the mind itself, or merely the effect of corporeal disorder. Much has been written upon the subject, especially by the psychologists of Germany, whose discussions have been characterized by such ardency of zeal that they might not inappropriately be termed a controversy. These writers have advocated three fundamental doctrines, and hence may be divided into the same number of schools: first, the Somatics, who believe that insanity is the effect of a purely corporeal disease, the mind (or the spiritual nature) itself remaining unimpaired; secondly, the Psycho-Somatics, who teach that both the mind and the body are diseased; and, thirdly, the Psychics, according to whom the disease is wholly mental, irrespective of

the condition of the body. As might be expected from a people prone to metaphysical studies, yet deeply learned in the natural sciences, much ability has been displayed in each of the three schools.

Among the physicians making insanity a specialty in the United States, we know of no one who believes it to be a disease of the spiritual part of our nature. They are unanimous in the opinion that it is the result of corporeal impediments to the free evolution of the operations of the mind, as irregularity in the movements of a watch may be the effect of some small substance placed among the internal works, and thus preventing the gradual but continual development of the elasticity of the mainspring. The watch indicates false time, but the spring is unimpaired. The insane man talks incoherently and fantastically, but his spiritual being is in its normal condition. The fact that a single portion of appropriate medicine has, more than once, entirely cured a paroxysm of violent mania, is, perhaps, of itself a sufficient proof of the truth of this theory; for is it not absurd to suppose that the essential structure or nature of the spirit can be reached and modified by a cathartic?

Definition.—It is truly remarkable, that insanity, a disease which, as a general rule, is so easily recognized, so apparently unique, so strongly marked by special characteristics, is wholly insusceptible of a brief and perfect definition. It may be described, but not defined. Numerous authors have attempted to define it, but all have signally failed. Some, and among them Dr. Spurzheim and a writer in the Transactions of the American Medical Association, include, in their attempts at a definition, the condition that the patient shall be unconscious of the disease. Those physicians can surely never have had large experience in the treatment of the insane; otherwise they would have learned that a considerable number of them are perfectly conscious of their condition, and some, perhaps two per cent. of the inmates of the hospitals, will frankly acknowledge it. But, as Dr. Tuke very justly remarks; "It is not in any definition of mental derangement that the student will learn what insanity is; and in a court of law, the practitioner ought never to be so unwise as to be tempted to offer one; for, as Burrows says, it is 'an ignis fatuus, which eludes and bewilders pursuit.'" Still, as an approximative definition is sometimes better than none, we will not leave the subject without quoting that of Dr. Combe, which, although quite imperfect, appears to us to be one of the best. "It is," says that excellent writer, "a prolonged departure, and without an adequate external cause, from the state of feeling and modes of thinking usual to the individual who is in health."

Classification—The effects, signs, or manifestations of mental derangement being diverse in the different individuals so affected, it has been found convenient, in descriptions of it, to generalize by bringing together and classifying similar cases, and to describe each group under a particular name. The attempts at classification have been nearly as numerous as those at definition; and although several authors, some of them pursuing quite opposite methods, have succeeded in producing a nomenclature sufficiently satisfactory for necessary purposes, yet none have reached, and probably none can ever reach, a point further than an approximative but imperfect generalization. We cannot perfectly classify that which, from its multitudinous diversities, varieties, and shades of difference, and from the overlapping, intermingling, alternating, and changing of its characteristics, is in its very nature insusceptible of perfect classification

The five great generic terms, Mania, Monomania, Melancholia, Moral (or Emotional) Insanity, and Dementia, constitute a grouping, which, for general purposes, is as good as any which has been devised. Yet the lines of demarkation between these are far from being distinctly drawn, and in thousands of cases the characteristics of two or more of them are so intermingled that, in practice, different observers would place the cases in different classes. Again: mania often alternates with melancholia; the demented person may, at the same time, be a maniac; a case of pure monomania is very rare, if, indeed, it ever exists; and moral or emotional insanity is treated as a nonentity by most of the members of the legal profession, by many physicians in general practice, and who consequently devote comparatively but little attention to mental disorders, and by a very few of the many physicians who have had the opportunity of observing large numbers of the insane. Hence, in the investigation of a case of insanity, or

of alleged insanity, before a judicial tribunal, unless the disease, in the case in question, be so strongly marked as to form a type of one of the classes, it would be but little less imprudent for the witness to assert that it belongs to either of those classes, than it would to attempt a definition of the disease. If he be wise, he will limit his testimony on this point to the simple declaration of his belief—or his unbelief—that the person is "of unsound mind."

Causes — The causes of mental alienation are various. In systematic treatises, they have been divided into classes, as the *physical* and the *psychical*, or *morel*, the *predisposing* and the *exciting*, the *remote* and the *immediate*. Thus a blow on the head, the intemperate use of spirituous drinks, and gestation and parturition, are, among many others, physical causes; and grief, disappointment, domestic difficulties, are examples of psychic or moral causes. A peculiar constitution favorable to the encroachment of mental disorder is a predisposing, and intense study an exciting cause. Almost any one of the numerous causes may be either remote or immediate, according to the relative time at which its influence is exerted.

If we consider the subject of causation, in its broadest relations to the human race, we shall be forced to believe, how unwelcome soever may be the conviction, that civilization, as it now exists, is the greatest of all the radical or remote influences productive of mental alienation. Although statistics upon the point are hitherto crude and imperfect, yet it is well known that among the aborigines of America, as well as among other savage races or people, insanity is very rare; that it appears to increase almost peri passu with advancing civilization, and, as a general rule, reaches its ultimatum of frequency in those nations where the arts and sciences have attained the highest degree of improvement. These facts have become known through observation, yet they might have been deduced by a priori reasoning from the well-known laws of physiology, provided man's proneness to infringe those laws were assumed in the premises. The brain is the organ of thought, the machinery through which all the operations of the mind are evolved. Like all other material things, it cannot be used without being impaired, and, like the other organs of purely animal life, it requires rest for the purpose of renovation. If used in perfect obedience to physiological laws, its power is gradually augmented; if abused by their constant infringement, deterioration, debility and disease are the inevitable consequences. And how often, at the present day, it is abused!

A thousand years ago, when the hill-tops of England were crowned with the castles of petty but warlike chieftains, and those chieftains, as well as the people, their menials, were robust with the active, unintellectual, and mostly out-of-door exercise which characterized the habits and customs of the feudal system; when the fine arts were but little cultivated, and the useful arts were still in a state of comparative rudeness; when newspapers were unthought of, and even the art of printing unknown; when books were in but small demand, and literature and science were confined almost exclusively to priests, to cloistered monks, and a few scholastics; when steam and electricity still slumbered among the unknown agents which may minister to the wants of man; when sedentary employments were but few and a large majority of laboring men were engaged in wholesome manual occupations; when enervating luxuries were scarce and dear, and hence within the reach of but few;—then the muscles and the bloodvessels predominated in the physical development, and, consequently, disease was generally seated in them. But time, science, art, and literature have wrought a wondrous change. The warlike and sturdy customs of the feudal ages have passed away, and artisanship and trade have supplied their place. Printing has scattered literature and science broadcast over the civilized world. Steam, water-power, and machinery have taken from human muscles a very large proportion of the labor which they once performed. Railroads and telegraphs have imparted to us new ideas of time and space, and every department of human activity is undergoing a consequent transformation. Life, if measured by its true meter—the sum of action and of experience—has been more than doubled, yet its whole extent must be crowded into the same number of years as formerly. This exhausts nervous power, and the brain and nerves, called into greater activity to supply this power, become, as a whole, by the law already mentioned, more developed. On the other hand, our comparative exemption from manual labor leaves the muscles more quiescent, and, from the converse of that law, they necessarily diminish. In this way, the brain and nervous system have obtained an inordinate relative development, and preponderate over the muscles and the blood. Disease, following this change, has left its former stronghold and now makes the brain and nerves its seat and citadel.

Look over our country and behold the manifestations of an almost universal desire to flee from agriculture and other rural and wholesome manual employments, into some one of the many spheres of mental labor. Behold what an arena of intellectual gladiatorial strife is this national Coliseum! What an amount of mental work in the learned professions! What a wear and tear of the brains of editors and others to meet the demands of the people for newspapers and other periodical publications! What a drain upon nervous power in the production of literary and scientific books! What a tax upon the vitality of mechanics in this unparalleled display of the inventive talent! What an exhaustive amount of thought, and care, and anxiety, among the merchants, manufacturers, and master-artisans, to create a fortune or to meet the stern requirements of the fearful little book which is lettered "Bills Payable!" Why should we be surprised that insanity is far more frequent than in former ages?

In connexion with this general view of the influence of the circumstances, conditions, and agencies of civilized life, as sources of mental disorder, it may be stated that estimates of the proportion of the insane to the whole population, in many countries, have been published; but in most instances they were based upon insufficient or erroneous data, and some of them are merely the guesses of individuals. We proceed to mention those which are authentic, and to be relied upon as nearly accurate:

In Canada, by the census of 1851, the proportion of both the insane and the idiotic to the whole population, was as 1 to 657. In Canada East, it was 1 in 513; in Canada West, 1 in 890.

From the reports of the Commissioners of Lunacy and the Poor Law Board, it appears that, on the 1st of January, 1861, there were, in England and Wales, 39,152 insane and idiotic persons. This is equal to 1 in 512 of the population; but Drs. Bucknill and Tuke believe that the numbers not reported were sufficient to raise that proportion to 1 in 300.

In Scotland the number of insane and idiots returned by the Commissioners of Lunacy, in 1861, was 8,084, which is equal to 1 in 344 of the population, according to the census of 1851. It is supposed that the number not reported would compensate for the increase of population during the decade.

In M. Legoyt's reports of the statistics of the French hospitals, it is stated that the whole number of insane in France, in 1851, was 44,970, or 1 in 796 of the population; but M. Legoyt adds, that the number reported from the hospitals was "below the truth," and of those who were not in the hospitals it is very improbable that the full number was returned

Doubtless one of the most nearly accurate enumerations of persons of disordered mind in any country is that taken by Dr. Dahl, in Norway, about three years ago. By that census the proportion of insane and idiots to the whole population was found to be 1 in 2938.

Predisposing Causes.—Descending from general to particular and limited generative influences, we shall first notice such as are called predisposing causes. Among these one of the most important is hereditary predisposition. Like many other maladies, insanity is disposed to propagate and perpetuate itself in the line of family descent, and instances are not unfrequent in which several children of an insane parent have become insane.

The proportion of the insane who directly inherit a predisposition to the disease has not been satisfactorily ascertained. There is incompleteness, confusion, and want of uniformity in the statistics upon the subject, some limiting the term "hereditary" to direct ancestral transmission, and others giving to it a wide scope among collateral relatives. We believe that no statistics have been more carefully prepared, and that none, in their results, arrive more nearly at the truth, than those of Dr.

Thurnam, in his analysis of the cases received at the Retreat, at York, England, from 1796 to 1840. They are as follows:

	Male.	Female.	Total.
Hereditary on the paternal side	19	20	39
Hereditary on the maternal side	17	23	40
Hereditary on both the paternal and the maternal side	3	3	ß
Hereditary, whether on paternal or maternal side not known	32	36	- 68
Known to be hereditary		82	153
Not known or stated to be hereditary	152	164	316
` Totals	223	246	469

The term "hereditary," in this table, is restricted to direct lineal transmission. It will be seen that of 469 patients, 153, or 32.62 per cent., had insane ancestors.

Dr. Baillarger, an eminent Parisian psychologist, after a somewhat extensive investigation of the subject, arrived at the following general conclusions:

- "1. The insanity of the mother, as regards transmission, is more serious than that of the father, not only because the mother's disorder is more frequently hereditary, but because she transmits it to a greater number of children.
- "2. The transmission of the mother's insanity is more to be feared with respect to the girls than the boys; that of the father, on the contrary, is more dangerous as regards the boys than the girls.
- "3. The transmission of the mother's insanity is scarcely more to be feared, as regards the boys, than that of the father; it is, on the contrary, twice as dangerous to the daughters."

As corroborative, in most respects, of these conclusions, we make the subjoined extract from the late Dr. Amariah Brigham's report, for 1846, of the hospital at Utica, New York:

"It would appear from our inquiries, (and they have been very carefully conducted,) that insanity is a little more likely to be transmitted by the mother than the father, and that mothers are considerably more likely to transmit it to daughters than to sons; while the fathers most frequently transmit it to sons. Thus, of 79 men, 42 had insane fathers, and 35 insane mothers, and in two instances both parents were deranged; while of 96 women, 37 had insane fathers, and 56 insane mothers, and three inherited a predisposition to insanity from both parents."

In Dr. Earle's History and Statistics of the Bloomingdale Asylum, 96 cases—52 men and 44 women—are reported, in which the insanity was of direct parental inheritance. Of the 52 men, the father was insane in 26 instances, the mother in 25, and both parents in 1; and of the 44 women, the father of 17 was insane, the mother of 26, and both parents of 1. These results confirm M. Baillarger's first conclusion.

Constitutional Predisposition.—The constitutional organization of some persons renders them more liable than others to the encroachments of mental disease. It is doubtless this peculiar nature of the bodily—perhaps merely of the nervous—structure which, in the offspring of the insane, renders the disease hereditary. But that organization may, and often does, arise de novo, in one person or more of a family theretofore exempt from the malady. It is impossible to say wherein this peculiarity exists. It does not appear to be connected with either of the technically termed "temperaments;" and it is most reasonable to suppose that it is in the primitive molecular structure of the brain, and consequently inappreciable by any of the present means of observation.

Consanguineous Marriages.—The disposition to degeneracy, in some form, in the offspring of marriages of cousins, or others near of kin, has long been known, but comparatively recent investigations in both Europe and the United States, and particularly those of MM. Boudin and Devay, in France, and Dr. Bemiss, of Kentucky, have more fully illustrated the subject and more satisfactorily demonstrated the fact.

The subjoined results of some of Dr. Bemiss's investigations are eminently significant:

"Of 31 children born of brother and sister, or parent and child, 29 were defective in one way or another; 19 were idiotic; 1 epileptic; 5 scrofulous, and 11 deformed. Of 53 children born of uncle and niece, or aunt and nephew, 40 were defective; 1 deaf and dumb; 3 blind; 3 idiotic; 1 insane; 1 epileptic; 12 scrofulous, and 14 deformed. Of 234 children born of cousins—themselves the offspring of kindred parents—126 were defective; 10 deaf and dumb; 12 blind; 30 idiotic; 3

insane; 4 epileptic; 44 scrofulous, and 9 deformed. Of 154 children born of double cousins, 42 were defective; 2 deaf and dumb; 2 blind; 4 idiotic; 6 insane; 2 epileptic; 10 scrofulous, and 2 deformed. Of 2,778 children born of first cousins, 793 were defective; 117 deaf and dumb; 63 blind; 231 idiotic; 24 insane; 44 epileptic; 189 scrofulous, and 53 deformed. Of 513 children born of second cousins, 67 were defective; 9 deaf and dumb; 5 blind; 17 idiotic; 1 insane; 6 epileptic; 15 scrofulous, and 9 deformed. Of 59 children born of third cousins, 16 were defective; 3 deaf and dumb; 1 idiotic; 1 insane; 2 epileptic, and 10 scrofulous."

M. Boudin's researches were directed more particularly to the origin of deaf-mutism, but one of his conclusions is not inappropriate in this place. "The hypothesis of the pretended harmlessness of consanguineous marriages is contradicted by the most evident and well-verified facts, and can only be excused by the difficulty, or rather the impossibility, of giving a physiological explanation of the production of infirm children by parents who are physically irreproachable."

Now, although it may fairly be presumed that, in many of the cases reported by the gentlemen engaged in the interesting inquiry, other causes than consanguineous marriage assisted in the production of the many unfortunate results, yet it appears to be very clearly proven that sterility attends, and that bodily malformation, tubercular consumption and other scrofulous affections, spasmodic diseases, epilepsy, blindness, deafness, idiocy, and insanity, follow in the offspring of such marriages much more frequently than in matrimonial alliances between the parties to which there is no traceable affinity by blood. Researches have not hitherto been sufficiently extensive to demonstrate the comparative proportion, but it is sufficient for the purpose of the philosopher, the philanthropist, or the statesman, that the predominance of those unfortunate results in the marriages of cousins and other near relatives is placed beyond a reasonable doubt.

The subject has already commanded the attention of the legislatures of several of the States, but no law, so far as we are informed, has yet been enacted in regard to it.

There are certain other influences—circumstances and conditions—some of them natural, others artificial, incidental, or acquired, which, to a greater or less extent, must operate either in promoting or opposing the production of insanity; and although we may not be justified in pronouncing them predisposing causes, yet, as they in some measure affect its prevalence, it appears the most appropriate to mention them in this connexion.

Sex.—The organization and the rôle of the two sexes are so different, and either of them is subjected to the influence of so many causes from which the other is either partially or wholly exempt, that the relative proportion of mental disorder prevalent in each becomes an interesting problem. Some physicians, arguing from the premises stated, have concluded that the proportion must necessarily be greatest among males; others, by a similar process of reasoning, have arrived at the opposite conclusion. Men are exposed to a greater number of causes than women, and intemperance, the most prolific of all, finds among them a very large majority of its victims. Women have a more delicate and impressible nervous system than men, and some of the most potent agents in the production of the disease necessarily operate upon them alone. Investigating the subject by statistics, Esquirol and some other eminent continental and British authors have decided that women are more subject than men to mental disorder. Others, and among them Dr. Thurnam and Drs. Bucknill and Tuke, arrive at the conclusion that the prevalence of the disease is greatest among men. "It is clearly proved," says Dr. Tuke, "that, in general, fewer women, as was taught by Cælius Aurelianus, become insane than men," but "it is difficult to establish that the female sex is intrinsically less susceptible to the causes of insanity than the male, since the former is less exposed to those causes than the latter."

In 94,169 patients admitted into the French hospitals for the insane, from 1842 to 1853, inclusive, the ratio of males to females was as 114 to 100.

In 1850, Dr. Jarvis collected from the reports of twenty-one American hospitals a total of 24,573 cases in which the sex was distinguished. The relative proportion of the two was 121 males to 100 females. Ten years afterwards, in 1860, Dr. R. J. Dunglison, from the reports of more than forty American hospitals, collected the similar statistics of 48,995 cases. Of this large number, 25,593 were males and 23,402 females, a proportion of but 109 of the former to 100 of the latter. The same writer

states that the proportion of the sexes between the ages of twenty and fifty years—the period of greatest liability to insanity—in the whole population of the United States, according to the census of 1850, was 108 males to 100 females. The two proportions are very nearly identical, the insane men slightly predominating.

But there are sources of error in these American statistics. First: In the earlier history of our hospitals for the insane, before their character as humanely-conducted resorts was established, a much larger proportion of the insane men than of the insane women in the community were taken to them. The reports of the hospitals show this, and there is a striking proof of it in the reduction of the proportion of males, as compared with females, from 1850 to 1860, as shown by the statistics collected by Drs. Jarvis and Dunglison. Secondly: These statistics, with perhaps some small exceptions, represent the number of cases, instead of the number of persons. A woman, admitted ten times into a hospital, is counted as ten women; a man, as ten men. If it be assumed that the readmissions of the two sexes were equal, then it will make no difference in the result, so far as the question of sex is concerned. But this assumption is gratuitous, and quite absurd in an endeavor to demonstrate a question by statistical figures.

Let us examine the subject in relation to one hospital. At the Hartford Retreat, from the time of its opening to the close of March, 1863, the number of cases received was 1,912 males, 2,168 females, the females exceeding the males by 256; but the number of persons was but 1,528 males, 1,661 females, the females exceeding the males by but 133. Hence, in this instance, by taking the cases instead of the persons, an error of 123, in a total of 4,080, would be the result. In the number of cases, the women exceed the men by 13.38 per cent.; whereas the real excess, as shown by the number of persons, was but 8.7 per cent. On the whole, however, we think it is very satisfactorily demonstrated that a greater proportion of men than of women become insane.

Age.—Neither profound professional knowledge nor uncommon acuteness of observation is necessary to the discovery of the general facts, that in early life, and particularly before puberty, mental disorders are comparatively rare; that during the active period of manhood, when the intellectual and moral faculties are in their utmost vigor, when the appetites and the passions are the most defiant of control, and all the greatest obstacles in a world of strife are to be contended with, these disorders are most frequent; and that in old age, when the many struggles of life are past, when the goal of early ambition is either won or the hopes of its attainment relinquished, when appetite has become obtuse, passion more gentle, and opinions fixed, they again become comparatively few.

To these general propositions many of the writers upon insanity, as, for example, Millingen. Conolly, Andrew Combe, Dubuisson, Falret, Voisin, and Fodéré, confine themselves. Others give boundaries to the period of greatest frequency. Dr. Rush limits it between the ages of 20 and 50 years; Neville, between 20 and 40 years; Syer, between 28 and 45; Guislain, between 20 and 35; and Sir Alexander Morison, between 25 and 40. Some have still further circumscribed those limits. Drs. Burrows, of England, and Belhomme, of France, place them at 30 and 39 years, and Drs. Brown, Georget, Aubanel, and Thore, at 30 and 40; while M. Quétélet, the statistician, says, "The age between 40 and 50, or rather the fortieth year, is the period of life most subject to insanity."

Of the whole number of persons becoming insane, the proportion of children under 15 years of age is probably not over two per cent. From 15 to 20 years, and for some time afterwards, the number pretty rapidly increases; but it attains its maximum in the decade from 20 to 30. Nevertheless, although there are more first attacks in that decade, it does not necessarily follow that the greatest liability to the disease is in that period. In order to ascertain the time of greatest liability, the numbers of first attack, in each decennium of life, should be compared with the numbers in the corresponding decennia in the general population. This has been done by several writers. Dr. James Bates, in 1845, made the calculation, taking for his elements the patients received at the hospital in Augusta, Maine, and the population of the State mentioned, according to the census of 1840. Dr. Thomas S. Kirkbride did the same, in the same year, his elements being the patients

admitted into the Pennsylvania Hospital for the Insane, and the population, in 1840, of the eastern district of Pennsylvania. Dr. Pliny Earle, in 1846, based a similar calculation upon the patients received at the hospital at Utica, N. Y., and the population of New York in 1840. Dr. Richard J. Dunglison, in 1860, made the comparison between 12,472 cases of first attack, collected from thirteen American hospitals, and the whole population of the United States in 1850. Finally, Drs. Thurnam and Tuke have thus compared the patients received at the York Retreat, between 1796 and 1840, with the population of England in 1847. The results are as follows, the decennium of greatest liability to attack being placed first, and the others in succession according to the relative liability:

Dr. Bates.	Dr. Kirkbride.	Dr. Earle,	Dr. Dunglison.	Drs. Thurnam and Tuke.
From 30 to 40 years.	From 20 to 30 years.	From 30 to 40 years.	From 30 to 40 years.	From 20 to 30 years.
From 40 to 50 years.	From 40 to 50 years.	From 20 to 30 years.	From 20 to 30 years.	From 30 to 40 years.
From 20 to 30 years.	From 30 to 40 years.	From 40 to 50 years.	From 40 to 50 years.	From 40 to 50 years.
Over 70 years.	From 50 to 60 years.	From 50 to 60 years.	From 50 to 60 years.	From 50 to 60 years.
From 50 to 60 years.	Under 20 years,	From 60 to 70 years.	From 60 to 70 years.	From 60 to 70 years.
From 60 to 70 years.	From 60 to 70 years.	Under 20 years.	Over 70 years.	From 10 to 20 years.
Under 20 years.	From 70 to 80 years.	From 70 to 80 years.	Under 20 years.	From 70 to 80 years.
•				From 80 to 90 years.

In Dr. Earle's cases, the proportion in the decade from 30 to 40 was, to the proportion in the decade from 20 to 30, as 100 is to 99.1, showing that the liability in the former exceeded that in the latter by only nine-tenths of one per cent.

Again we are obliged to bear testimony to the greater accuracy of the foreign statistics. It is believed that all those used in their comparisons, by the American physicians, were rendered imperfect by that important fallacy already mentioned—the taking of cases instead of persons—so that if a man were admitted any number of times, he counted as that same number of men in the decade within which he was first attacked.

It will be perceived that the discrepancy in the results of the investigations of Dr. Dunglison, Dr. Earle, and Drs. Thurnam and Tuke, are not very great; and we cannot forbear the conclusion that, when the comparison shall have been made between sufficient and accurate numbers, it will be found that, in the United States, the period of greatest liability to mental disorder is in the decennium from 20 to 30 years of age, and that the other decennia, in this respect, will bear the same relative position both to one another and to that between 20 and 30, as they do in the results of the researches of the English physicians mentioned.

It is generally believed that the average age, at the time of first attack, is greater in women than in men. M. Legoyt states, that in France, of 1,000 male patients, the first attack in 570 instances was before the fortieth year; while of 1,000 females, it was before that year in only 485 instances. But this estimate was based upon the ages of the patients when admitted into the hospitals, and hence cannot be perfectly accurate. From a similar estimate based upon 2,728 cases collected by Dr. Bates and Dr. Earle, from American reports, it appears that of 1,000 males, the first attack was before the age of 40 in 785 cases; while of 1,000 females, it was before that age in but 749 cases.

Seasons.—In regard to the several seasons of the year in relation to mental disorder, the most that can be said, although there are many statistics upon the subject, is, that more patients are received at the hospitals, in both Europe and America, in summer than in winter—more in the warmest six months than in the coldest six months. If persons becoming insane were always directly removed to the hospitals, the question might be accurately determined. Drs. Aubanel and Thore infer, from their statistics, that June has the most, and January the least, influence in producing the disease. It is doubtless true, also, that there is more excitement among the patients in the hospitals in summer than in winter. But there is vastly more insanity in the northern temperate than in the torrid zone; and, as has been already shown, its prevalence in no other country is so great as in Norway, one of the most northerly of all civilized nations.

Conjugal Relation.—All statistics that have come under our observation concur in showing that, of all persons whose ages are within the period during which there is much liability to the disease, a much larger proportion of the single than of the married become insane. Thus, of the male patients treated in the hospitals of Paris from 1822 to 1833, the ratio of the single and the married was as 41.6 and 47, although there were but half as many single as married men resident in the city.

Rejecting the persons whose condition in regard to marriage was unknown, 29,250 patients were treated in the hospitals of France in 1853. Of this number, 18,078, or 61.80 per cent., were single, 8,493 married, and 2,679 widowed. Of the whole number of inhabitants of France over 15 years of age, only 36.74 per cent. were unmarried.

According to Dr. Dunglison, of 25,721 cases treated at twenty American hospitals, 12,462, or 48.4 per cent., were single; 11,150, or 43.3 per cent., married; 2,092, or 8.1 per cent., widowed; and 17 divorced.

Among the widowed insane, the number of women greatly exceeds that of men. In the French hospitals, in 1853, there were 1,888 widows, and but 791 widowers; and of the foregoing 2,092 cases treated in American hospitals, 1,338 were widows, and but 537 widowers. The difference is very remarkable.

The researches of Drs. Parchappe, Aubanel, Thore, and others, in France, of Thurnam, Tuke, and others, in England, as well as of every compiler of statistics upon the subject in this country, have all led to similar results as those above mentioned.

Occupation.—The occupations of men are so diverse, not only in their character, as mental or physical, but also in the degree to which exertion, either intellectual or corporeal, is required in their pursuit, as well as in their modification of surrounding external influences, that the physiologist could hardly fail to infer that the effect of some of them must be greater than that of others in the production of mental disorders. Without entering into a discussion of the subject, it may merely be remarked that the more nearly natural the employment, the less will be its probable influence in causing insanity.

M. Legoyt, by a comparison of the number of insane in each profession, or occupation, who were in the French hospitals in 1853, with the similar numbers in the general population, arrived at the following results:

Of the liberal professions, the proportion was	1 to	562
Soldiers and sailors, the proportion was	1 to	502
Persons engaged in commercial pursuits, the proportion was	1 to	2,347
Persons engaged in mechanical pursuits, the proportion was	1 to	1,495
Servants, day laborers, &c., the proportion was	1 to	644
Miscellaneous, and no occupation, the proportion was	1 to	1,594

The great proportion of soldiers and sailors is accounted for by the fact that provision is made for the immediate removal to a hospital of every man, in these two classes, who becomes insane.

The next in frequency are the members of the "liberal professions;" but the word "liberal" is here used with a broader signification than usual in connexion with the professions. In order that it may be understood, as well as to show the proportion in each employment, we present all the occupations included under it:

Liberal Professions.	Proportion.
Artists, (painters, sculptors, architects, engravers, musicians)	1 to 104
Jurists, (judges, advocates, notaries, lawyers, bailiffs)	1 to 119
Ecclesiastics, (including monks and nuns)	1 to 253
Physicians, (including surgeons, apothecaries, and midwives)	1 to 259
Professors and men of letters	1 to 280
Public office-holders and employes	1 to 727
Proprietors and tenants	1 to 806

The very remarkable proportion in the first five classes, which consist almost exclusively of persons devoted to mental pursuits, cannot fail to be observed.

It is to be remarked that farmers are included under the head of "mechanical pursuits," in the first table; and it is shown that their proportion is far less than that of the others under the same head.

The proportion in the class of servants, &c., is very large. "This," remarks the author, "can only be explained by the great number of single persons in this class of those devoted to the in-door service of families, and we have already seen that a majority of all the inmates of asylums are unmarried."

Dr. Dunglison, having collected, from the reports of fourteen American hospitals, 7,329 cases in which the profession or occupation is mentioned, and compared the numbers in each group with the corresponding numbers in the general population, according to the census of 1850, arrives at results which are thus stated:

- 1. "Occupations which bear a greater ratio to the number of the insane than to that of the general population.
 - "The learned professions-medicine, divinity, and law.
 - "Other pursuits requiring education.
 - "Sea and river navigation.
 - "Commerce, trade, manufactures, mechanic arts, and mining.
- 2. "Occupations which bear a greater ratio to the number of the general population than to that of the insane.
 - "Agricultural pursuits.
 - "Government civil service."

He found the liability to, or the prevalence of, the disease in the "learned professions," to be in the following order: students, lawyers, physicians, dentists, clergymen; and in other pursuits requiring education, as follows: artists, druggists, teachers, musicians, engineers. These two classes being compared with each other, the relative liability or prevalence stood thus: artists, druggists, students, teachers, lawyers, physicians, dentists, clergymen, musicians, engineers.

Education.—Before we leave the subject of predisposing causes, it should be remarked, in the language of Dr. Earle, in the National Almanac for 1863, "that he who attempts thoroughly to investigate the sources of mental disorder at the present day will soon become convinced that, to a large extent, its foundation is laid in early life, by the faulty or pernicious practices too often followed in the education and the rearing of the young. The stimulating drinks of the table, the late hours, the excitements of society and of popular assemblies, in all of which here, more than in any other country, they are indulged; the confinement and the hot-house forcing of the brain in the studies of the school, and the neglect, to promote physical exercise to the degree necessary for that development of the body which will enable it to maintain a healthy equilibrium with the mind;—all these assist in creating a nervous irritability and a general abnormal condition of the body, which greatly expose the individual to attacks of bodily disease and of mental disorder. The brain is brought into such a state that a slight exciting cause, either physical, intellectual, or moral, may drive it into that diseased action the effect of which is insanity."

Exciting Causes.—In proceeding to a cursory examination of the more purely exciting causes, it may be premised that insanity is a disease of debility, and not of a superabundance of strength, as was, in former times, generally, and still is, to a wide extent, believed. It necessarily follows that whatever exhausts the power of the brain and nerves, depresses vitality, or debilitates the body, may, through these effects, become the causative agent of insanity. Hence ill health, the intemperate use of spirituous liquors, debauchery, self-abuse, excessive and prolonged labor, either manual or mental, night-watching or great loss of sleep from any cause, excitement upon religious subjects, domestic and pecuniary difficulties, disappointment and grief, are among the influences most productive of the disorder.

In the article in the National Almanac from which the foregoing extract is taken, the ten in Ost prolific causes, as exhibited in the records of the Massachusetts State Hospital, at Worcester; the Bloom-ingdale Asylum, New York; and the Pennsylvania Hospital for the Insane, Philadelphia, are reported. Dr. John S. Butler, of the Retreat, at Hartford, Connecticut, has, in his last report, combined these three tables and added thereto the similar records at the Retreat. We copy the resulting table as One

of the most satisfactory and instructive expositions of the subject hitherto published. It is re-arranged, in order to place the several causes in the order of their apparent relative influence:

	Worcester,	Bloomingdale.	Pennsylvania Hospital.	Retreat.	Total.
Whole number of cases, with causes, reported	3, 197	1,186	2,220	2, 870	9, 473
1. Ill health of various kinds	695	237	601	720	2, 253
2. Intemperance	194	117	243	258	812
3. Religious excitement	296	. 93	137	214	740
4. Domestic unhappiness	413	65	87	163	728
5. Intense mental or bodily exertion	7 9	30	237	329	675
6. Puerperal state	1 41	99	152	145	53 7
7. Masturbation	270	37	5 0	161	518
8. Grief, loss of friends, &c	72	43	193	203	511
9. Perplexities in business	140	133	140	94	50 7
10. Disappointed affection	116	38	57	99	3 10
Total	2,416	892	1,897	2, 386	7,591

Thus, of the 9,473 cases in which the causes were reported, 7,591, or 80.13 per cent of the whole, are supposed to have been produced by one of the ten causes, or classes of causes mentioned; and let it be especially observed that all these causes are such as exhaust, debilitate, or depress the vital or nervous power.

Drs. Bucknill and Tuke, by a similar collocation of 30,087 cases reported in European and American hospitals, found the most prolific causes, and their order as productive influences, to be as follows: "domestic troubles and domestic grief, intemperance, epilepsy, affections of head and spine, uterine disorders, religious anxiety and excitement, disappointed affections, vice and immorality, fever and febrile diseases, fear and fright, intense study, political and other excitement, wounded feelings."

If the several diseases in this series of causes be included under one head, as they are in the foregoing table, the series will become as follows:

1. Ill health of various kinds. 2. Domestic troubles and domestic grief. 3. Intemperance. 4. Uterine disorders. 5. Religious anxiety and religious excitement. 6. Disappointed affection. 7. Vice and immorality. 8. Fear and fright. 9. Intense study. 10. Political and other excitement. 11. Wounded feelings.

There is now a strong similarity, so far as regards the causes, between this (English) series and that (American) in the above table. Even the difference in the relative position of the causes is mostly very easily to be explained. The second English cause, or class of causes, precedes the third, (intemperance,) because it includes both the fourth and eighth of the American causes. The fourth English cause takes its higher position by reason of comprehending not only the sixth, but also a part of the first, American cause. The seventh English cause doubtless includes the seventh American.

Aside from "ill health," a generic term comprising a pretty large number of specific causes, it appears that intemperance, in both Europe and America, is the most abundant producer of mental disorders. Dr. Tuke concludes, from his researches, that about 12 per cent of the cases admitted to the hospitals are directly caused by it—an estimate which very nearly corresponds with the proportion in the foregoing table. But a vast number are produced by it indirectly, not only by inducing poverty, grief, ill health, &c., but also by giving the sad inheritance of mental imperfection and disease to offspring.

Dr. Dahl states that, in Norway, the most abundant sources of insanity are hereditary predisposition, the intermarriage of near relatives, and the use of spirituous drinks. In regard to the last, he publishes

a curious but instructive table, showing the prevalence of insanity in relation to the habits, temperate or intemperate, of the people in the several sections of Norway. It is as follows:

·	Sober (or temperate) persons in 100 of the population.	
Diocese of Christiansand	56.2	1 in 246
Diocese of Christiana	59.5	1 in 287
Diocese of Trondhjem	63.4	1 in 296
Diocese of Tromsö	70.5	1 in 361
Diocese of Bergen	72.6	1 in 345

It will be perceived that insanity regularly diminishes as temperance increases in the several successive districts, with the single exception of the last.

In connexion with the subject of intemperance, it may be mentioned that, of all the cases to which causes are assigned in the reports of American hospitals, about one per cent. are attributed to the use of tobacco and opium.

We have now shown the alleged causes of more than four-fifths of the cases of mental disorder treated in our hospitals, in which the sources could be satisfactorily ascertained. The remaining fraction of cases were attributed to a large number of influences, many of them of very limited prevalence. It is unnecessary to name them, but all of them are such as either directly or indirectly exhaust or depress the nervous power, the great sustainer of vitality.

As but little has hitherto been written respecting one of the most prolific causes of insanity, and as what has been ventured on this subject has appeared, generally, in works of a scientific character, of limited circulation, we feel constrained to present here some views with which we have long been impressed on the subject of—

Insanity from Religious Excitement.—From its essential nature and the importance of its functions and its objects, the religious sentiment, when brought into great activity, must necessarily sway the whole physical, and, consequently, from the intimate connexion between mind and body, the whole physical element of our being. History confirms this teaching of philosophy; for in all ages of the world, and under every system of theology, that sentiment has often exercised a dominant power over the character and the conduct of men. Hence it is, perhaps, not very remarkable that, among the most frequent generative agents of insanity in the United States, we find "religious excitement." Placed in a position where we have brought together, in one focal point, all the insane of the land, with the causes apparent which have produced much of this widespread misery in its most appalling form, we feel it a duty to the cause of humanity to set forth, in plain words the unnecessary evils which have flowed from injudicious efforts in the cause of greatest good, (wherein we shall encounter the prejudices of many excellent persons,) in the hope that the facts presented may result in the advancement and honor of religion by detaching some of the evils which, at times, accompany its promulgation; and we the more readily make avail of this means, because in no other way can we reach those who are to benefit themselves and others by the results of our investigations.

Rational men, we trust, will view with forbearance, if they do not approve, any candid and unprejudiced statement founded on facts, having in view the benefit of mankind; while those who take exception will probably adopt new opinions, if they will but dispassionately investigate the question. That the subject is one worthy the careful study of the philanthropist, and entitled to the prominence which we have given it, no enlightened man will question, after due consideration of the table exhibiting the ten principal agents productive of the disease, which is embodied in this article.

It must be remembered, too, that comparatively little of the general misery in different forms, which results in insanity, is represented at any one period by such development, as many other forms of suffering are ever attendant upon whatever is widely productive of the overthrow of reason. This form of calamity seems to be the unerring, evident, and solemn indicator of something wrong, not only inviting, but demanding serious consideration. There are four principal methods by which the religious sentiment is aroused to that point at which it not unfrequently results in the production of mental disorders.

First. By those extraordinary and spasmodic efforts which occur in all sections of the country, which are not restricted to any one sect or denomination, and are doubtless conceived in a spirit of benevolence, yet in which, to say nothing of the character of the exercises, the excitement, both mental and corporeal, is long-continued, and necessarily produces nervous exhaustion—the condition most favorable for an attack of insanity.

Secondly. By that denunciatory and, as appears to us, intemperate style of preaching, wherein the terrors and consequences of Divine wrath are portrayed with all the vigor and the force of a vivid imagination, giving over the minds of the young, the sensitive, the susceptible, and the strongly-conscientious, to the dominion of despondency and fear, the action of which is powerfully depressive to the vital energy, and, consequently, strongly promotive of an invasion of mental disorder; while the solemn and awe-inspiring rites of some services are sore trials to the minds of the sensitive and superstitious, contribute their influence to the subversion of reason, and would be even more frequently fatal but for their rapidly and strongly contrasting variations, so illustrative of the remedial power attributed to the administrators of these imposing ceremonies, which modifies their effect.

Thirdly. By those less public and more social exercises in which, not by ministers alone, but by the laity as well, the religious sentiment is stimulated by appeals which reason is hardly free to avert, and where, by a community of exercises, an excitement of the *nervous system* (too often mistaken in regard to its origin and its character) is more easily aroused than in larger and more public assemblies.

Fourthly. By solitary reading and meditation upon religious subjects, until personal demerit and its consequent punishment become the sole occupants of the thoughts, to the exclusion of those consolations which the spirit of Christianity guarantees; all other subjects, even the most evident, important, and pressing social duties, being lost sight of.

The records of all our hospitals will unquestionably furnish many examples of insanity produced by each of these causes. Touching one of them, we make an appropriate extract from the report, for 1861, of the Butler* Hospital for the Insane, written by Dr. Ray, who remarks that he introduces the example "not because it is strange and unparalleled, for such is not the case, but simply by way of illustration."

"A worthy couple, one of whom, if not both, had inherited a strong tendency to mental disease, had lived quietly and happily together until they entered upon the period of middle life. While thus pursuing the even tenor of their way, there occurred in the community an unusual excitement of the religious sentiment, manifested by frequent meetings; and these persons, who, though morally correct, had never shown any particular interest in such things, determined, in imitation of their friends and neighbors, to frequent the meetings. This they did incessantly for three or four days, when reason began to give way under the unnatural excitement, and, within a week from the time they began, they both became furiously insane, and in that condition shortly after died."

The foregoing is from the records of the Butler Hospital; but Dr. Ray quotes from the report, for 1859, of the Royal Edinburgh Asylum, a case which is illustrative of the fourth of the above-mentioned methods. "Six cases," says that report, "were caused by religious excitement. " " " The third case was a male, who had attended no meetings, but had pored over the newspaper accounts of the revivals until he ultimately experienced some violent paroxysms, which, he said, were the 'coming of God' on him. He became convulsed; the convulsions increased in severity, and his whole body was distorted; violent excitement and incessant restlessness continued up to the time of his death, which occurred in nine days after his first seizure."

It is probably not generally known that many of the physical demonstrations, such as spasms, convulsions similar to those in the foregoing case, and "trances," phenomena which sometimes occur in religious assemblies of Christians, and are often, as in the case at the Edinburgh Asylum, attributed to a supernatural source, and which assume different forms in different localities, are perhaps still more frequent among pagans.

In congregations of "Hurlers," or "Howling Dervishes," one of the minor denominations of Mahometans, they are quite common, and we have the authority of the Brahmin, Gangoola, a Hindoo convert to Christianity who recently visited America, for the assertion that they are not infrequent among the Buddhists of his native country. As illustrations of the third of the methods above mentioned, there are upon the records of some of our hospitals, cases, the circumstances of which, had they occurred in Central Africa or New Zealand, and been known in this country, would have awakened many an expression of sorrow and of pity for the superstition and the fanaticism of the benighted heathen.

Let it be remembered that in writing thus we are condemning the abuse of the religious sentiment, not its wholesome, sustaining, and normal exercise.

The late Dr. Woodward, in his report, for 1838, of the hospital at Worcester. Massachusetts, while conceding the agency which "a subject so deeply interesting to the human mind as its eternal being" must have in the production of insanity, remarks very appropriately:

"How wide from the appropriate office of religion it is to cause insanity—to carry human beings backwards, as it were, from the knowledge and the contemplation of their Creator, instead of aiding their approaches towards Him! Why, then, should it produce this effect? Why, in less than six years, should it have sent seventy persons to this hospital for the insane? It can only be because its motives and its sanctions have not been rightly addressed to individuals; or because those individuals have evidently misapprehended the true nature, office, and power of religion. There seems, then, but little reason to anticipate that either of these three causes of insanity (including "ill health and domestic afflictions") will be materially diminished until juster notions of our human condition, duty, and destination shall pervade those portions of society where error is now preparing its victims to become insane."

Here we might well stop in our exposition of this branch of our subject, but we cannot for bear to add the remarks of Dr. Ray, at the close of his discussion. They are more particularly addressed to persons who inherit a predisposition to mental derangement, but are worthy the attention of all:

"The voice of admonition too often falls on unwilling ears, for people are slow to believe that exercises which are highly meritorious, because leading to a good result, and prompted, perhaps, by Divine influence, can, by any possibility, be dangerous to mental health. Indeed, it seems to them little short of impiety to suppose it. Let them remember that they are yet in the flesh, and that no pursuit or exercise, however commendable, can be successfully followed by a system of means not in accordance with the laws of the animal economy. They may be sure that these will not be suspended to enable them to accomplish a desirable end; and they may be also sure that Divine influences are always in harmony with those natural laws which have proceeded from the same beneficent source. Those who are sincerely desirous of guarding against the development of morbid tendencies, should carefully avoid all scenes of religious excitement, indulge their religious emotions in quiet and by ordinary methods, always allowing other emotions and other duties their rightful share of attention. Regulated in this manner, the religious sentiment will be to them not only a source of spiritual comfort, but a power more efficient, it may be, than any other, for maintaining the healthy balance of the faculties, and keeping in abeyance the hereditary proclivities to disease."

Although perfectly aware that many great, good, and influential divines have pursued a policy inconsistent with our views, in order to obtain a more perfect mastery over the power or will of their heavers, yet, with the lights before us we cannot but conclude that. by the cultivation of a different style, they would have proved equally great, and to have exercised even wider influence for good, without that alloy of evil which, though it may not have been realized because diffused, existed as surely as that like causes produce, under similar circumstances, like effects.

If this exposition touching a fruitful cause of insanity should have the effect of modifying the character of religious teachings, so as to render them more consistent with the real interests of humanity, and thus to insure greater respect for principles in danger of being prejudiced by inconsiderate abuse, we shall have accomplished an end worthy of greater efforts in resulting good.

Treatment.—Among the many evidences of progressive science and enlightened philanthropy furnished by the history of the last three-quarters of a century, none are more characteristic, and perhaps no one appears in bolder relief, than the system of treatment of the insane which, adopted within that period, now widely prevails among civilized nations. In a civil, social, and moral point of view; the space is broad which separates the gloomiest cell of a prison, with its bolts, bars, and chains, from spacious apartments furnished with the conveniences and comforts, as well as many of the luxuries. of

life. Yet this space has been traversed by the insane within the seventy years next preceding the present time. It is proposed to give in this place a brief sketch of the history, more especially in respect to the United States, of this important amelioration of the condition of a large class of our fellow-men.

About the middle of the eighteenth century some philanthropists of Philadelphia took preliminary measures for the foundation of a general curative institution in that city; and in 1751 the provincial assembly of Pennsylvania passed an act of incorporation under the title: "The Contributors of the Pennsylvania Hospital." This charter provided not only for the relief of persons suffering from general diseases, but also for the "reception and cure of lunatics."

It is believed that this was the first legislative provision in the American colonies for the restorative treatment, in a public hospital, of persons afflicted with mental alienation. The hospital was opened on February 11, 1752, and thenceforward one of its departments was specially appropriated to that class of patients.

The next practical movement in a similar direction was in Virginia; and to her belongs the honor of being the pioneer of all the colonies in the establishment of an institution exclusively devoted to the insane. An act providing for the lunatics and idiots of the colony passed her legislature on November 10, 1769. A hospital was erected at Williamsburg at an expense of £1,070, and opened on or about September 14, 1773. In the course of the war of independence the building was evacuated and used as barracks for the colonial troops. Subsequently, but at what precise period we are not informed, it was re-opened, and has since been conducted in accordance with its original purpose.

In 1771 the Earl of Dunmore, then governor of the colony of New York, granted a charter for the institution now known as the "New York Hospital," in the city of New York. The intervention of the war with England prevented the opening of this hospital until January 3, 1791. Insane patients, so far as appears by the records, were not admitted until 1797.

Such, and such alone, according to present knowledge, were the completed provisions for the care and treatment of the insane, in the hospitals of the United States, prior to the close of the eighteenth century. But the character of the treatment was more custodial than curative; and the means employed, including, as they did, the severest forms of bodily restraint, were better adapted to felons than to persons laboring under disease.

We have now arrived at the period of initiation, in another country, of an enterprise which, whether we regard the boldness of its beginning, the rapidity of its progress, the extent of territory over which it has spread, the success which it has achieved, or the amount of good to mankind of which it has been the minister, challenges the admiration of every advocate of human improvement and every lover of his race.

In the midst of the horrors of the French revolution, Dr. Pinel walked the reddened streets of Paris a minister of benevolence, a physician with a heart. He was connected with the Bicêtre Hospital, in which many of the insane were confined in cells, and loaded with manacles and chains. After repeated solicitations, he at length, in the latter part of the year 1791, obtained permission from the public authorities to remove these torturing implements of bodily restraint. The first person upon whom the experiment was tried was an English captain, who, being subject to paroxysms of extreme violence, had been chained there forty years. A promise of good behavior having been obtained from him, the chains were loosed, and the man, returning as it were to the joys of life, kept his promise, rendered himself useful, and had no recurrence of maniacal fury during the two additional years of his residence in the hospital. Twelve inmates of the hospital were thus relieved from their irons on the first day of the experiment, and in the course of a few days forty-one more were similarly released. History furnishes few sketches of more touching interest than the account of these proceedings given by M Scipion Pinel, son of the chief actor in them.

Nearly simultaneously with the early measures of Pinel, and, as is believed, without any knowledge of them, William Tuke, of York, England, conceived the plan of founding a hospital for the treatment of the insane, upon principles more enlightened and humane than had theretofore prevailed in Great

Britain. His plan was carried into execution by the construction of the Friend's Retreat for the Insane, at York, which was opened in the year 1796.

Such was the twofold source of the movement which, though compelled to contend with the precedents and the prejudices of ages, and though, for this and other reasons, its progress was slow for many years, was destined fully to triumph over established usage in the countries of its origin.

Before the close of the eighteenth century, German students in the medical school of Paris had carried home the new theory and practice of Pinel, and had begun that work of reformatory regeneration of the institutions for the insane in their native land, which, though small at its beginning and repressed by hindrances similar to those already alluded to, has since been prosecuted with perhaps no less vigor or success than in France or England.

The spirit of the enterprise crossed the Atlantic more slowly than it traversed the boundaries of the German states. The first decennium of the current century furnishes no new movement on behalf of the insane in the United States, except the erection for their accommodation of a separate though nearly adjacent building at the New York hospital. This occurred in 1808.

As early as 1797 Mr. Jeremiah Yellot, of Baltimore, gave seven acres of land to the State of Maryland, on condition that the government should found a hospital for the treatment of insanity and general diseases. In 1798 an appropriation for the purpose was made, and, increased by private contributions as well as by an appropriation by the municipal government of Baltimore, applied to the construction of a suitable building. But the hospital was not opened until 1816.

The success of the retreat at York having become known upon this side of the Atlantic, some members of the Society of Friends, in Pennsylvania, desiring to provide hospital accommodations for the insane, formed an association in 1812, obtained a charter, erected a building near the village of Frankford, but now within the limits of the city of Philadelphia, and, under the title "Asylum for the Relief of Persons deprived of the use of their Reason," the institution was opened in May, 1817.

In the course of these proceedings in Pennsylvania measures for the attainment of a similar end were taken by the trustees of the Massachusetts general hospital, in Boston. A distinct establishment, though a branch of that institution, was constructed near Charlestown, now in Somerville, and, designated as the "McLean Asylum for the Insane," was opened on the 6th of October, 1818.

Five institutions for the care and curative treatment of the insane in the United States went into operation in the course of the decennium terminating with the close of 1830. In 1815 preliminary measures were prosecuted by the board of governors of the New York hospital for the foundation, at Bloomingdale, of a branch of that institution. A grant from the State legislature of an annuity of ten thousand dollars, for forty years, was obtained, an edifice erected and opened for patients in 1821, under the title of "Bloomingdale Asylum for the Insane." The retreat for the insane at Hartford, Connecticut, and the Kentucky Eastern Lunatic Asylum, at Lexington, first received patients in 1824; and the Western Lunatic Asylum of Virginia, at Staunton, as well as the State Lunatic Asylum of South Carolina, at Columbia, in 1828.

Earliest in the next succeeding period of ten years was the State Lunatic Hospital, at Worcester, Massachusetts, which was opened in 1833. The Vermont Asylum for the Insane, at Brattleboro', followed in 1836; the Central Ohio Lunatic Asylum, at Columbus, in 1838; the City Lunatic Asylum, at South Boston, Massachusetts, and the New York City Lunatic Asylum, on Blackwell's Island, both pauper institutions, in 1839; and the Maine Insane Hospital, at Augusta, and the Tennessee Hospital for the Insane, at Nashville, in 1840. Not far from the beginning of the year 1838 the patients with general diseases were removed from the Maryland Hospital, at Baltimore, and that institution was thenceforth devoted to the treatment of insanity alone.

It was during this decennium that the greatest impulse was given to the scheme for ameliorating the condition of the insane in the United States. In the production of this impulse, no man exerted greater influence than the late Doctor Samuel B. Woodward, who was at that time superintendent of the State Lunatic Hospital, at Worcester, Massachusetts. The zeal and hopefulness with which he

illuminated a sphere thitherto almost universally regarded, in the popular mind, as shrouded with clouds and involved in darkness, and the elaborate and interesting reports which, emanating from his pen, were scattered broadly through the country, all contributed to the awaking of an interest in the subject which had never previously been manifested.

In the course of this period, also, that eminent philanthropist, Miss D. L. Dix, began a series of benevolent and beneficent labors to which female biography, throughout the history of the world, probably exhibits no equal. Beginning in Massachusetts, and subsequently proceeding to other States, she traversed the counties and townships within their several jurisdictions, visited all the public receptacles for the insane, together with all the private hovels, dens, garrets, and cellars for solitary maniacs, to which access could be gained. She stimulated individuals to exertions and contributions in the cause, and, in memorials to legislatures and by appeals to Congress, called upon the governments to extend the assistance of the commonwealth to this class of its suffering people.

In 1839, a pamphlet entitled "A Visit to Thirteen Asylums for the Insane in Europe," by Dr. Pliny Earle, was published in Philadelphia and extensively circulated among physicians and others interested, or likely to become interested, in the subject. As the first somewhat comprehensive account of the European establishments which appeared in this country, it had no small influence in the promotion of the cause.

The Pennsylvania Hospital for the Insane, situated about two miles west of the old State House, in Philadelphia, and a branch of the Pennsylvania Hospital, was opened in 1841. The New Hampshire Asylum for the Insane, at Concord, the Mount Hope Institution, at Baltimore, Maryland, and the Lunatic Asylum of the State of Georgia, at Milledgeville, commenced operations in 1842; the New York State Lunatic Asylum, at Utica, in 1843; the first hospital disconnected from the almshouse for the insane poor of Kings county, New York, at Flatbush, in 1845; the Butler Hospital for the Insane, a corporate institution, at Providence, Rhode Island, in 1847; and the New Jersey State Lunatic Asylum, at Trenton, the Indiana Hospital for the Insane, at Indianapolis, and the Insane Asylum of the State of Louisiana, at Jackson, in 1848.

Such were the completed results of the increased activity of the enterprise in the fourth decade of the century. Among the most important agencies in the promotion of the cause, in the course of this period, was the "Association of Medical Superintendents of American Institutions for the Insane," which held its first meeting in Philadelphia, in 1845.

The propositions relative to the construction, arrangements, and organization of hospitals for the insane, drawn up by Dr. Thomas S. Kirkbride, of the Pennsylvania Hospital for the Insane, and adopted by this association, have generally been received as the highest authority upon the subjects. Although the idea may have occurred to others, yet Dr. Francis T. Stribling, superintendent of the Western Lunatic Asylum of Virginia, was the first to take the active measures which led to the promotion of this useful association, which has greatly contributed to a uniformity of views and practice among the superintendents of American hospitals for the insane.

The first number of the American Journal of Insanity was issued in July, 1844. It was edited by its originator, the late Dr. Amariah Brigham, at that time superintendent of the New York State Lunatic Asylum, at Utica. Intended not alone for the benefit of professional readers, but also for the dissemination of more accurate views of insanity among the people, its editor endeavored to adapt its contents to the attainment of this twofold object. The Journal is still continued, under the editorship of Dr. John P. Gray and the other officers of the Asylum at Utica. It has assumed a more purely scientific and professional character, and has done great service in the cause to which it is devoted.

In the course of this decade Dr. Luther V. Bell, of the McLean Asylum, Dr. Isaac Ray, of the Butler Hospital, Dr. H. A. Buttolph, of the New Jersey State Lunatic Asylum, and Dr. Pliny Earle, for several years connected with the Bloomingdale Asylum, visited the rapidly improving institutions of Europe. Among the fruits of their observations we have the design of the Butler Hospital, by Dr. Bell; an elaborate résumé entitled "Observations on the Principal Hospitals for the Insane in Great

Britain and Germany," by Dr. Ray; some articles in the Journal of Insanity, by Dr. Buttolph; and a descriptive work entitled "Institutions for the Insane in Prussia, Austria, and Germany," by Dr. Earle.

No less than eighteen new institutions were put in operation in the course of the decennium from 1851 to 1860, inclusive. The State Lunatic Hospital of Pennsylvania, at Harrisburg, the State Lunatic Asylum of Missouri, at Fulton, and the Illinois State Hospital for the Insane, at Jacksonville, were organized and first received patients in 1851. The new building of the Tennessee Hospital, a few miles from Nashville, was so far completed as to be occupied in 1852. The State Insane Asylum of California, at Stockton, and the Hamilton County Lunatic Asylum, a pauper institution, now at Mill Creek, near Cincinnati, Ohio, and called the Longview Asylum, were opened in 1853; the Massachusetts State Lunatic Hospital, at Taunton, and the Western Lunatic Asylum of the State of Kentucky, at Hopkinsville, in 1854; the United States Government Hospital for the Insane, near Washington, District of Columbia, the new building of the Kings County Lunatic Asylum, at Flatbush, New York, the Mississippi State Lunatic Asylum, at Jackson, the Northern Ohio Lunatic Asylum, at Newburg, the Southern Ohio Lunatic Asylum, at Dayton, and Brigham Hall, a corporate institute, at Canandaigua, New York, in 1855; the Insane Asylum of North Carolina, at Raleigh, and a department of the Western Pennsylvania Hospital, at Pittsburg, (since transferred to an extensive establishment at Dixmont,) in 1856; the Massachusetts State Lunatic Hospital, at Northampton, and the New York State Asylum for Insane Convicts, at Auburn, in 1858; the Michigan Asylum for the Insane, at Kalamazoo, and a department of the Marshall Infirmary, at Troy, New York, in 1859; the Alabama Hospital for the Insane, at Tuscaloosa, and the Wisconsin State Lunatic Asylum, at Madison, in 1860.

In January, 1860, the Pennsylvania Hospital for the Insane separated the sexes, by placing them in two distinct establishments, about one quarter of a mile apart, but on the same farm and under the same general medical superintendence. The buildings of the department for males are as large as the original buildings for both sexes, and were erected and furnished wholly by the contributions of private citizens, chiefly residents of Philadelphia. This is the first example, in America, of a system for the treatment of the sexes in separate establishments, independent each of the other except in their general government.

A valuable work entitled "A Manual for Attendants in Hospitals for the Insane," by Dr. John Curwen, of the State Lunatic Hospital of Pennsylvania, appeared in 1851; and in 1854 Dr. Thomas S. Kirkbride published a treatise "On the Construction, Organization, and General Arrangements of Hospitals for the Insane," which has become a standard authority.

The State Hospital at Austin, Texas, was opened in either 1860, or the first part of 1861, (we have had no means of obtaining the exact date,) and the Iowa State Hospital, at Mount Pleasant, in 1861.

Inasmuch as the people of all the States have a community of interest in one of the public hospitals above mentioned, it is proper that we should give a more particular account of that institution than of those of a more local character.

The Government Hospital for the Insane was specially intended for the insane of the army, the navy, the revenue cutter service, and the indigent of the District of Columbia. It is situated on the eastern shore of the Potomac river, within the limits of the District of Columbia, and about two miles south of the Capitol, in Washington. The principal building, constructed of brick, is seven hundred and twenty feet in length. Its architectural plan and internal arrangements are among the best which have resulted from the experience and the studies of many able men employed in the specialty. A farm of one hundred and ninety-five acres belongs to the establishment.

The first appropriation by Congress for this institution was made in August, 1852. Dr. Charles H. Nichols was soon afterwards appointed as superintendent, and under his direction and supervision the building was begun in May, 1853. A section of it was completed and opened for the reception of patients in January, 1855. It is now complete, with the exception of the internal finish of a small section. The aggregate amount of appropriations for the purchase of the farm and the construction of the buildings, is \$473,040.

The number of patients on the first of July, in each year since the hospital was opened, was as follows: in 1855, 63; in 1856, 92; in 1857, 110; in 1858, 117; in 1859, 138; in 1860, 167; in 1861, 180; in 1862, 212; and in 1863, 278. The number of persons treated prior to the 1st of July, 1863, was 974. Of these, 432 were natives of the United States; 422 of foreign countries, and the place of birth of 120 is unknown.

The hospital is under the general supervision of the Department of the Interior. Since it was commenced, six different men, representing various shades of political opinion, have held the office of secretary, and all of them have manifested an intelligent, liberal, and benevolent interest in the success of the enterprise. In no instance has the department sought to control the patronage of the institution, or in any degree to cripple its usefulness by making it contribute to the especial advantage of the political party in power. Congress has been liberal in its appropriations; and among its members the hospital, in every stage of its progress, has found warm and earnest supporters, whose aid was honorable to themselves and a cause of gratitude in the heart of every American philanthropist. The hospital remains in the charge of Dr. Nichols, under whose supervision it has been wholly created.

Aside from the public institutions, a few private establishments for the treatment of the insane have been opened in the United States, in the course of the last forty years. Although some of those which have been discontinued were directed by able and humane men, and several others still in operation are considerably patronized and well conducted by men of high character, yet a consciousness of the undeniable tendency to abuse involved in a purely private pecuniary enterprise of this kind, as shown in the history of similar establishments in Europe, has operated to discourage their multiplication and prosperity in this country.

Since the opening of the public institutions, nearly all of them have been enlarged, some to the extent of doubling or trebling their original capacity. With few exceptions, chiefly among those most recently founded, the buildings have been undergoing changes of internal architecture and arrangement, in conformity with progressive knowledge. They differ very materially in plan, extent, structure, and means and facilities for the prosecution of curative treatment. A large proportion of them will not suffer in comparison with the better class of similar institutions in Great Britain, France, and Germany. It is believed that, in executive administration, they are governed with prudence, benevolence, and kindness; that their officers are generally earnest laborers, emulous of improvement; and that the unfortunate insane may be committed to them in full confidence of immunity from cruelty or abuse.

The following table includes a list of the American hospitals now in operation, together with some particulars not mentioned in the foregoing historical sketch:

Tropicus for the Institute in the Ontices States, 1005.								
Title.	Location.	State.	Foundation.	Date of opening.	Present superintendent or physician.	Patients at latest test dates.		
1. Eastern Lunatic Asylum 2. Friends' Asylum 3. McLean Asylum 4. Bloomingdale Asylum 5. Retreat for the Insane 6. Eastern Lunatic Asylum 7. State Lunatic Asylum	Williamshurg Philadelphia Somerville New York Hartford Lexington Columbia	Virginia	Corporate do do do do do State do do	1817 1818 1821 1824 1824 1828	Dr. J. H. Worthington Dr. John E. Tyler Dr. D. Tilden Brown Dr. John S. Butler Dr. W. S. Chipley Dr. J. W. Parker	257 62 176 161 231 231 192		
8. Western Lunatic Asylum 9. Lunatic Hospital 10. Maryland Hospital 11. Insane Department Philadelphia Hospital 12. Asylum for the Insane 13. Central Lunatic Asylum	Staunton	Virginia	dodoPauper	1836		379 396 106 523 438 260		

Hospitals for the Insane in the United States, 1863.

Hospitals for the Insanc in the United States, 1863-Continued.

Title.	Location.	♥ State.	Foundation.	Date of open- ing.	Present superintendent or physician.	Patients at la- test dates.
14. Boston City Lunatic Asylum	South Boston	Massachusetts	Pauper	1839	Dr. Clement A. Walker	241
15. New York City Lunatic Asylum	New York	New York	do	1839	Dr. Moses H. Ranney	769
16. Insane Hospital	Augusta	Maine	State	1840	Dr. Henry M. Harlow	252
17. Hospital for the Insane	Near Nashville	Tennessee	do	1840	Dr. — Jones	158
18. Pennsylvania Hospital for the Insane	Philadelphia	Pennsylvania	Corporate	1841	Dr. Thomas S. Kirkbride	285
19. Asylum for the Insane	Concord	New Hampshire.	State	1842	Dr. Jesse P. Bancroft	188
20. Mount Hope Institution	Baltimore	Maryland	Mixed	1842	Dr. William H. Stokes	228
21. Lunatic Asylum	Milledgeville	Georgia	State	1842	Dr. Thomas F. Green	27
22. Lunatic Asylum	Utica	New York	do	1843	Dr. John P. Gray	514
23. Butler Hospital for the Insane	Providence	Rhode Island	Corporate	1847	Dr. Isaac Ray	132
24. Lunatic Asylum	Trenton	New Jersey	State	1848	Dr. H. A. Buttolph	334
25. Insane Asylum	Jackson	Louisiana	do	1848	Dr. J. D. Barkdull	157
26. Hospital for the Insane	Indianapolis	Indiana	do	1848	Dr. J. H. Woodburn	3●0
27. Lunatic Hospital	Harrisburg	Pennsylvania	do	1851	Dr. John Curwen	267
28. Hospital for the Insane	Jacksonville	Illinois		1851	Dr. Andrew McFarland	231
29. Lunatic Asylum	Fulton	Missouri		1851	Dr. T. R. H. Smith	171
30. Insane Asylum	Stockton	Califernia	do	1851	Dr. W. P. Tilden	416
31. Longview Asylum	Mill Creek	Ohio	Co. pauper	1853	Dr. O. M. Langdon	357
32. Lunatic Hospital	Taunton	Massachusetts	State	1854	Dr. George C, S. Choate	411
33. Western Lunatic Asylum	Hopkinsville	Kentucky	do	1854	Dr. F. G. Montgomery	138
34. Lunatic Asylum	Jackson	Mississippi	do	1855	Dr. Robert Kells	106
35. U. S. Government Hospital for Insane	Near Washington.	Dis. of Columbia	United States.	1855	Dr. Charles H. Nichols	249
36. Northern Lunatic Asylum	Newburg	Ohio	State	1855	Dr. O. G. Kendrick	141
37. Southern Lunatic Asylum	Dayton	Ohio	do	1855	Dr. Richard Gundry	161
38. Brigham Hall	Canandaigua	New York	Corporate	1855	Drs. G. Cook and J. B. Chapin.	40
39. Kings County Lunatic Asylum	Flatbush	New York	Pauper	1855	Dr. Edward B. Chapin	366
40. Insane Asylum	Raleigh	North Carolina	State	1856	Dr. Edward C. Fisher	147
41. Western Pennsylvania Hospital	Dixmont	Pennsylvania	Mixed	1856	Dr. Joseph A. Reed	114
42. Lunatic Hospital	Northampton	Massachusetts	State	1858	Dr. William H. Prince	332
43. Asylum for Insane Convicts	Auburn	New York	do	1858	Dr. Charles E. Van Anden	51
44. Asylum for the Insane	Kalamazoo	Michigan	do	1859	Dr. E. H. Van Deusen	155
45. Hospital for the Insane	Madison	Wisconsin	do	1860	Dr. J. P. Clement	103
46. Hospital for the Insane	The state of the s	Alabama	1	1860	Dr. James P. Bryce	
47. Hospital for the Insane*	Austin	Texas	do		Dr. J. M. Steiner	60
48. Hospital for the Insane	Mt. Pleasant	Iowa	do	1861	Dr. R. J. Patterson	140
Total number of patients			ne.			11,133

^{*} Opened in 1860 or 1861.

Since the foregoing was written we have received information, believed to be authentic, that, in October, 1862, the legislature of Oregon "passed a law for the proper care of the insane and idiotic;" that, in pursuance thereof, a hospital has been established at East Portland, in the said State, and that, in the summer of 1863, "new wings, kitchen," &c., were to be added to the building.

The only States in which there is no hospital of the kind are Arkansas, Delaware, Florida, Kansas, and Minnesota.

The aggregate number of patients in the hospitals (11,133) is less than half the number (23,999) returned by the census. Hence the wants of the country, in this respect, are far from being supplied, and a broad field is still open for the exertions of private liberality and philanthropy, and the manifestation of public beneficence.

The treatment of insanity, as pursued in the hospitals at the present day, is properly divided into two parts. One of these might be termed the *direct*, the other the *indirect*, but they are generally called the *medical* and the *moral* treatment. The medical treatment consists in the use of such medicines as, in each particular case, will be likely to restore the body to a healthy condition.

This treatment, as a method, has undergone a radical change within the last fifty—mostly within the last thirty—years. Formerly, based upon the hypothesis that insanity is a disease of strength, or of active inflammation, it chiefly consisted in the liberal employment of blisters, purgatives, cupping, and bloodletting. Now, founded upon the well-supported theory that the disorder originates in debility, its principal remedies are stimulants and tonics. The success of the present method demonstrates not only the excellence of the practice, but the truth of the theory.

The moral treatment includes the exercise of a mild but firm directive and disciplinary power over the actions of the patient, by which he is gradually restored to healthful habits and wholesome self-restraint, and the attempt to win him from the vagaries of his delusions to those mental and manual pursuits which give solidity, strength, and activity to the normal mind. The means adopted for the attainment of these ends are, the regular hours of hospital life, appropriate manual labor, walking, riding, athletic and other games, attendance upon religious services, reading and other literary pursuits, lectures upon scientific and miscellaneous subjects, dramas, concerts, balls, and other recreations, entertainments, and amusements. In the method of moral treatment the change has been no less than in that of medical treatment. This change may be comprehended in two brief, generic statements: first, the almost absolute disuse of mechanical appliances for bodily restraint; and, secondly, the introduction of the conveniences, comforts, and, to some extent, the luxuries that appertain to civilized life, into the apartments of the patients, and to all parts of the hospital establishments where such means will benefit them.

The following noteworthy table, compiled from the records of the Lincoln Asylum, England, by Robert Gardiner Hill, house surgeon of that establishment, well illustrates not only the extent to which mechanical restraint was once employed, but the statistical history of its reduction.

Year.	Total number in the house.	Total number restrained.	Total number of instances of re- straint.	Total number of hours under restraint.
1829	72	39	1,727	20, 424
1830	92	54	2,364	27, 1134
1831	70	40	1,004	10,830
1832	81	55	1,401	15, 671 1
1833	87	44	1,109	12,0031
1834	109	45	647	6, 59 7
1835	108	28	323	2,874
1836	115	12	. 39	334
1837	130	2	3	28

"In connexion with the foregoing, it must be mentioned that the entries of the visitors and the reports of the physicians alike agree in describing the condition of the patients as much improved, the quiet of the house increased, and the number of accidents and suicides materially reduced."

Subsequently to the record in the table, mechanical restraint was resorted to in but one or two instances, and, in 1838, Mr. Hill published a work in which he advanced the following proposition as a principle: "In a properly constructed building, with a sufficient number of suitable attendants, restraint is never necessary, never justifiable, and always injurious, in all cases of lunacy whatever." The doctrine found many advocates and followers in England, but in France, Germany, and the United States it has been almost universally rejected. All men of experience in the specialty are well aware that there are occasional instances in which the true interest and welfare of the patient are best promoted by restraint, of some kind, upon the limbs. Even Mr. Hill admits this; and the great defect, as appears to us, in the practical working of his principle is, that, in order to secure this restraint, the hands of an attendant are substituted for some mechanical appliance. What man, sane or insane, would not be more restive

and violent if held by another man than if confined by a leathern muff upon his hands? In the former case mind encounters mind and muscle grapples with muscle, and the struggle consequently becomes more and more vehement; in the latter, the contention is simply with brute matter, where resistance is merely passive, and there can be no exasperation of the conflict by mutual irritation and reaction. While, therefore, the superintendents of American hospitals reject the arbitrary rule of Mr. Hill, they adopt the safer one of employing mechanical restraints only when they are required by the best interests or true welfare of the patient.

Manual employment is considered one of the most powerful agencies in the promotion of a cure from insanity. It requires exercise, and thus promotes sleep, digestion, and all the bodily functions. It tends to concentrate the mind upon a useful object, and therefore to withdraw it from its vagaries, aberrations, and delusions.

This branch of the treatment, although extensively employed in the American hospitals, has not been so thoroughly systematized and applied to so large a proportion of the patients as in the foreign, and especially the British, institutions. In an article in the American Journal of Insanity for October, 1862, Dr. Jarvis presents a table of the per-centage of employed patients in eighteen British hospitals. "The average," says he, "of the fifteen asylums in which the proportion of both sexes employed is stated, is, of males 67.2, and of females 69.2 per cent." In one year the per-centage at the Edinburgh Asylum was, males 95, females 80.

We must omit further details upon moral treatment, although it is a branch of the general curative system so important, that, other things being equal, that hospital will be the best which keeps in operation the most elaborate means of pursuing it. And so extensive have these means become in some of our hospitals, that, what with libraries, museums of curiosities, and specimens of natural history, newspapers, lectures, musical instruments, horses and carriages, bowling-alleys, billiard-tables, &c., even a sane man, to whom a somewhat retired situation is not distasteful, may there find plentiful resources for the leading of a comfortable, pleasant, and intellectual life.

"The subject of moral treatment," writes Dr. Bucknill, "is as wide as that of education; nay, wider; for it is education applied to a field of mental phenomena extended beyond the normal size by the breaking down of all the usual limits. Every case has its peculiarities, requiring that its moral treatment should be adapted to them. Moreover, in identical cases, if such can be supposed to exist, the same treatment will not equally succeed in the hands of different medical men. M. Leuret says: 'To combat the same disease two physicians take each a different part; (Query, method?); since, finding in themselves dissimilar faculties and aptitudes, they choose the means with the use of which they are best acquainted. The moral pharmacopæia of the physician, if we may be permitted the expression, is in his head and in his heart; he has in himself that which he gives to his patient. If ingenious, he will give much; if clumsy, although learned, he will do no good. As for precepts and guides, if they exist for you, they are in you; seek them not elsewhere. The moral treatment is not a science; it is an art, like eloquence, painting, music, poetry. However great a master of the art you may be, if you give rules, he alone will submit himself to them who is your inferior. In matters of physical science there are precise rules; in mathematical ones there are rigorous calculations; but in morals, there must be inspiration.'"

As an illustration of the spirit of Dr. Leuret's remarks, as well as to give a specimen from that yet unwritten book which the elder D'Israeli might have entitled "The Curiosities of Moral Treatment," we close our remarks upon this part of our subject with an extract from the report for 1842, of Dr. Woodward, of the hospital at Worcester, Massachusetts. "At one of my daily visits to the hayfield," says he, "I found four homicides mowing together, performing their work in the best manner, and all cheerful and happy." It is not every man who would venture to put scythes, simultaneously, into the hands of four insane homicides.

Curability.—If subjected to proper treatment in its early stages, insanity, in a very large proportion of cases, may be cured. Many statistics upon the subject have been published, but in some instances they were collected under conditions so restrictive that they conveyed an erroneous impression.

It may, perhaps, be safely asserted that, in cases placed under proper treatment within even one year from their origin, from sixty to seventy per cent. are cured. But the earlier the treatment is adopted the greater is the probability of restoration, and a delay of three months is a misfortune, as it is a detriment, to the patient.

Of all the cases, both recent and chronic, received at our public institutions, the average of cures is not far from forty per cent. At thirty hospitals in the United States, in 1859, the number of cases admitted was 4,140, and the number discharged as cured 1,728, equal to 41.7 per cent. Of 57,978 cases received, in a series of years anterior to 1860, at twenty-nine of our hospitals, 24.573 had been discharged cured; this is equal to 42.38 per cent. It must be remembered, however, that in mental alienation, as in other diseases, many patients suffer from relapse, or recurrence of the disorder, and hence, in the reported number of cures last given, there are many instances of two or more cures of the same person. The statistics of our hospitals, as already mentioned, are still crude, the only thorough analysis hitherto published being that of the cases at the Bloomingdale Asylum, prior to 1845. By those it appears that, although the admissions or cases had been 2,308, the number of persons was but 1,841. The number admitted twice, each, was 280; thrice, each, 81; four times, each, 33; five times, each, 18; and thus the number diminishes until it ends with one patient who was admitted twenty-two times, and discharged cured every time. Of the 1,841 persons, 742, or 40.3 per cent., were cured.

In cases where the disease has existed more than one year, the average of cures varies at different hospitals and in different periods. Some reports state it as below *fifteen*, others as somewhat above *twenty*, per cent. At many institutions, no distinction between old and recent cases is made in the reports.

The foregoing facts appeal strongly to the friends of the insane, to permit no long delay in placing them under curative treatment. They address themselves also, in connexion with the subject of pauper insanity, to the political economist and the legislator. The indigent man becoming insane may, if soon restored, preserve his pecuniary independence; if not restored, he becomes a charge for life to his friends or to the public—generally to the latter.

Of twenty *recent* cases treated and cured at the Western Lunatic Asylum of Virginia, the average period during which they were at the asylum at public cost, was 17 weeks and 3 days; the total cost, \$1,265, and the average, \$63 25. Of twenty *chronic* cases at the same institution, the average time during which they had been supported from the public treasury was 13 years, 4 months, and 24 days; their total cost, \$41,653; and their average cost, \$2,082 65.

The disparity in expense is great; but the actual sum of pecuniary difference does not wholly appear in the figures. The twenty persons cured had again become producers instead of mere consumers; the twenty persons with chronic insanity still lived at the public expense, and so would continue through life. Similar comparative statements, showing like results, have been made in the reports of several of our hospitals.

It is found that a larger proportion of women than of men recover; and that, in America, foreigners are not so curable as native citizens.

Many cases of cures stand as witnesses to the truth of the old medical adage, "While there is life there is hope." Dr. Kirkbride, in his report for 1847, mentions the restoration of a patient who had been nearly eight years insane, and more than six years in the hospital; and Dr. Buttolph, in his report for 1849, states that, in the course of the year, a woman, insane more than eighteen years, had recovered.

Dr. Ray, in the report for 1848 of the Butler Hospital, relates the case of a man who, before admission, had been in close confinement eleven years. He "had never left his cell except to pass into the adjacent one; he had never placed his foot upon the ground, nor breathed the air of heaven, except through grated windows." After nine months' treatment at the hospital, he was discharged; "and," continues the report, "from that day to this he has been earning an honest livelihood by working on a railroad."

The proportion of cures is much diminished by the number of cases of epilepsy, chronic paralysis, senile insanity, and other disorders in which the nervous system is incurably, generally organically, diseased. Among these may be reckoned that peculiar torpid condition of the nerves of sensibility, in which the patient is more or less insusceptible to both external and internal impressions. "Lunatics have sat," writes Dr. Conolly, "with their feet in the fire until they were shockingly burnt; others have drunk boiling water with apparent satisfaction."

A man under the care of Dr. D. Tilden Brown rested his leg against a heated stove until it was very deeply burned. Upon being asked why he did so, his expressive reply was: "I don't know; I wasn't there at the time."

A man treated by Dr. Earle one day said: "I sometimes have to knock myself against the table, to see if it is I."

Insanity is not unfrequently cured by attacks of other diseases. Among the most frequent restorations of this kind are those resulting from attacks of intermittent fever, boils, and other abscesses, erysipelas, and other diseases of the skin. Cures, however, are reported as the apparent effect of typhus and other fevers, acute rheumatism, inflammation of the tonsils, diarrhea, dysentery, &c.

Sometimes another disease merely suspends the mental disorder, the patient appearing nearly or quite sane during the course of that disease, but, after its departure, relapsing again into insanity. So, on the other hand, insanity may suspend, or alternate with, other maladies, but most particularly with phthisis, or tubercular consumption. In many cases of consumption, upon the invasion of mental disorder, all the symptoms of the former disease disappear, not to return so long as the latter is present. It would appear, however, from recent researches by Dr. Workman, of the hospital at Toronto, Canada, that in many of these cases, although the external symptoms of the consumption are absent, the disease itself not only still exists, but, silently and unknown, continues its progress towards fatality.

The most valuable statistics bearing upon the subject of the *permanent* curability of insanity, are those of Dr. Thurnam, who traced "the subsequent history of every patient who had been under care at the (York) Retreat during forty-four years, in whom death had occurred." The number of patients was 244, and the results, as generalized, are thus stated:

"In round numbers, of ten persons attacked by insanity five recover, and five die sooner or later during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die. But, although the picture is thus an unfavorable one, it is very far from justifying the pepular prejudice that insanity is virtually an incurable disease; and the view which it presents is much modified by the long intervals which frequently occur between the attacks, during which intervals of mental health (in many cases of from ten to twenty years' duration) the individual has lived in all the enjoyments of social life."

To these consolatory compensations it may not be improper to add the following:

Dr. George Chandler, in his report, for 1849, of the State Hospital at Worcester, Mass., says: "I have known a few individuals who were brought here insane, and who recovered, to be better citizens than they were before. Their minds and feelings acquired strength and soundness by the disease and by undergoing the process of cure, as some musical instruments are said to be improved by being broken and repaired again."

Again, the late Dr. Amariah Brigham, who, in 1842, was connected with the Retreat at Hartford, Conn., wrote as follows in his report for that year: "Some few exhibit more mental vigor and ability than previous to the attack of insanity. Of this I feel confident from my own observation and the declaration of their friends, and of the individuals themselves, the unusual and long-continued excitement of the brain having permanently increased its power and activity."

Dr. Earle mentions similar cases as having occurred in his practice at Bloomingdale.

Since many insane persons live ten or twenty years, and some even thirty, forty, or fifty years after the invasion of their disease, it might be inferred, by a casual observer, that the disorder does not materially, if at all, shorten life. But it is hardly rational to suppose that where the nervous system—the root, the motive power, of vitality—is so seriously affected, its strength and endurance can remain unimpaired; and statistics upon the subject have satisfactorily demonstrated that such is not the fact.

M. Legoyt shows that, in the French hospitals, from 1842 to 1853, the annual mortality was 13.75 per cent, or 1 in every 7\frac{1}{4}, while in the general population it was but 1 in 41.

Dr. Chandler, in 1853, reported some interesting and very conclusive statistics touching the

question. Of 201 men who had died in the hospital at Worcester, the average duration of life, after the first attack, was 6 years and 3 days; of 205 women, 4 years 11 months and 5 days; and of the whole 406 of both sexes, 5 years 5 months and 20 days. The average age at death was, for men, 48 years 8 months and 13 days; and for women, 44 years and 15 days. He remarks, that for persons in health the chances of life are four times greater for men, and five times greater for women.

Prevention.—Science has hitherto discovered no medicine which acts as a specific cure for insanity, and none which is a prophylactic or preventive of the disease. The chief power of prevention in the case of each person, lies with that person himself. We have already seen what are the principal causes from which the malady springs, and, knowing these, it becomes the duty of every one, as far as possible, to shun them. The man of sound judgment and prudent self-control will be "moderate in all things," avoiding those habits, practices, or excesses which exhaust or depress the vital force, allowing himself sufficient sleep to enable the brain and body fully to re-invigorate themselves from the fatigue of ordinary and wholesome labor, and living as near to nature as our multifold artificialities will permit.

The public authorities may do much towards decreasing the proportionate prevalence of the disease. We have already shown two ways in which something may be effected in this direction. It has also been shown that the intemperate use of spirituous drinks is the most fertile exciting cause of insanity. Hence, whatsoever diminishes intemperance reduces, indirectly, the number of the insane. Legislatures may enact wholesome laws aiming at such a diminution; and among those laws let provision be made for the establishment of hospitals or asylums for the treatment of inebriates—a class of institutions which are now one of the greatest of public needs. They would be a blessing not only to the people in general, but also to the hospitals for the insane, to which persons laboring under delirium tremens are now taken, but where they are out of place, almost invariably a detriment to the other patients, and notorious infringers of rules and regulations.

The subject of special establishments for inebriates has long been discussed, and the late Dr. S. B. Woodward published, some thirty years ago, a series of articles intended to awaken the public to a sense of their utility. Hitherto, however, but one institution of the kind has been founded. This is near Binghamton, New York.

Aside from the endeavor to diminish the prevalence of mental alienation, there are subordinate branches of the general subject which have strong claims to legislative notice. Insane convicts are generally confined in the hospitals; but, for many and mostly obvious reasons, this class of persons ought not to be brought into association with patients taken from the quiet homes and peaceful fire-sides of the people. The superintendents of many of the hospitals have earnestly and energetically protested against the practice, but hitherto with comparatively little effect. New York is the only State which has a hospital specially intended for the class in question.

The laws, both civil and criminal, relating to insanity and the insane, are still imperfect in all the States—perhaps less so in Maine than in any other part of the Union. So far as relates to the treatment of patients in the public institutions, those of Ohio are well adapted to the attainment of the great ends of the restoration of curable cases and the reduction of the amount of insanity. Still, a general code, embracing all the rights, privileges, immunities, necessities, and responsibilities of both the insane and sane, in relation to the disease, is a thing of the future and not of the present.

By a reference to the foregoing list of the hospitals in the United States, it will be perceived that those establishments exist under a singular diversity of titles, in which, however, the words "lunatic" and "asylum" play a very conspicuous part. Those titles should be made more nearly uniform, and the two words mentioned banished from them forever. The word "lunatic" is simply a misnomer, which tends to perpetuate a false theory of the origin of insanity, conceived in the days of ignorance and superstition, but long since exploded. It should be expelled not only from the titles of hospitals, but likewise from all the forms and books of law.

The modern establishments for the insane are curative institutions, not mere receptacles within

which persons may seek refuge for life. They are, therefore, hospitals, and not asylums. They are, in short, hospitals for the insane, and not lunatic asylums.

RELATIONS OF INSANITY TO CRIMINAL JURISPRUDENCE.

One of the most interesting as well as important subjects connected with insanity, is its relations to criminal jurisprudence. Until within a comparatively recent date, the general ignorance of the nature of the disease and the extent to which it affects human responsibility was such, that numerous criminal trials were bitter mockeries of justice; and many alleged felons were executed who, before an enlightened and just tribunal, must have been declared innocent, by reason of insanity, of the crime under the name of which they suffered. This ignorance pervaded not the mass of the people alone, but legislators, jurists, and physicians—the persons immediately responsible for the creation and the administration of law as affecting the insane.

In later time the subject has become better and more generally understood, and the plea of insanity, in cases of alleged crime, has rightfully been more frequently raised than formerly. Remembering the universal tendency of mankind to diverge from one extreme to its opposite, and remembering, likewise, that lawyers feel bound to protect their clients, under what possible plea soever it may be done, it need not be considered remarkable that the plea of insanity has, in some instances, been unjustly made, either in cases where there actually were some slight but insufficient grounds for the suspicion of the existence of mental disorder, or as a forlorn hope on the part of the prisoner's counsel.

By these subterfuges the guilty have, in a few instances, escaped merited punishment, and hence the plea of insanity has come to be, we think, too frequently looked upon with suspicion. It is a well known maxim of law, that it is better that ten guilty persons should escape punishment than that one innocent person should suffer. Yet, after all the abuses of the plea in question, we believe that, in this country, no less than ten persons innocent of crime, by reason of insanity, have suffered the extreme penalty of the law for every one who, being guilty, has escaped the legal punishment therefor under that plea.

Still, "two wrongs can never make one right," and no just atonement for the lives of the innocent insane, taken in the name of law in times past, can be made by the exculpation from punishment of real criminals in time to come.

Under present circumstances, with a better understanding of the subject among judges, lawyers, and the people who are liable to be selected as jurors, and with experts in mental disorders in nearly every section of the country, we perceive no great danger that the true ends of the law and of justice may not be attained if, in each case, the counsel for both parties perform their whole duty.

In cases where the prisoner has committed homicide under the influence of general mania, the insanity is so obvious as to leave no doubts upon the minds of judge or jury. It is in partial mania and in moral insanity alone that difficulties in the way of truth are likely to arise. In regard to these cases, the present position of physicians accustomed to the treatment of the insane, as well as of those courts which have kept pace with advancing knowledge in this department, has been so well stated by Judge Manierre, of Illinois, in the trial of William Hopp, in December, 1862, that we here subjoin the most important portions of his exposition:

"In monomania, or partial insanity, the hallucination is confined to a single object or a small number of objects. * * * Its true legal characteristic is delusive, or that state of the mind which is indicated by a belief in something in itself morally impossible—as that trees walk, statues nod—or in the belief of a state of facts in their nature morally impossible, but of the existence of which there is an entire absence of all reasonable grounds of belief. It also manifests itself in a belief of a direct revelation and of a controlling and irresistible sense of obligation to obey the revealed will.

"This state of the intellect indicates the existence of a disease which, in its effects, subjects the will, judgment, and conscience to the imagination with respect to the subject of the insane belief. The influence of such belief or delusion over the mind is much greater than the power of any conviction or belief in the mind of a sane person, and directs and controls the will, judgment, and moral sense, with inconceivably greater force. The individual thus affected may be able, in most respects, to reason correctly on any subject beyond the range of his hallucination, and be not unfitted for the intelligent care and oversight

of his business. Nor is the power of judgment and reasoning disturbed in any perceptible degree, even with respect to the subject of the delusion, as his conduct and reasoning are as logical and rational with respect to it as if the facts constituting the delusion were real and not imaginary.

"A man is not to be excused from responsibility if he has capacity and reason sufficient to distinguish between right and wrong as to the particular act he is then doing—a knowledge and consciousness that the act is wrong and criminal. But in these cases it is not deemed sufficient that the individual has a general knowledge that the act is wrong in its nature, because this general knowledge may well consist with delusion as to the moral quality of the act when considered with reference to the person and the circumstances believed to exist, and which in themselves constitute the delusion or insanity. There may be insane delusion with respect to one's moral duty under such circumstances, as well as in the belief which is the primary evidence of unsoundness of mind. From whatever cause the power of the will or conscience may be subjected or perverted by an insane affection, self-agency ceases, and acts done under the influence thereof are neither criminal nor punishable, because they are not considered voluntary. For this reason the law will excuse homicide on the ground of partial insanity in the following cases:

"First. When the accused takes life under circumstances in which the act would be excusable if the facts constituting the delusion had an actual existence, and were not mere hallucinations—as in defence of life or habitation.

"Second. When the act is done under a delusive belief of a Divine command and overruling necessity, or under a controlling sense of moral duty, which deludes and misleads the understanding and conscience with respect to the moral quality of the act.

"Third. Where the delusion consists in the belief that a wrong has been done to the accused in a manner which, if true as believed, would not excuse homicide, but he is, at the time of the commission of the act, so affected by the disease as to be incapacitated from knowing that he is doing wrong, and is unconscious of wrong."

Under the old ruling of the courts, that the existence of the power of discrimination between right and wrong, as a general principle, held the prisoner to his normal responsibility, hardly one in a hundred of insane homicides could escape the utmost rigors of the law; for the insane, unless utterly imbecile, almost universally retain that power.

Judge Manierre thus speaks of moral insanity:

"As defined by those medical writers who treat this disease, it consists in the existence of some of the natural inclinations dispositions, or propensities, in such violence that it is impossible not to yield to them. It is attended with no delusion or disorder of the intellectual faculties in any notable degree, and the mind is conscious of right and wrong while under its influence. And yet, notwithstanding this consciousness, the mere violence of the inclination to commit the act is so great as to overthrow all the power of resistance which the mind may be able to oppose to it. Under its influence the individual ceases to be a moral agent. When manifesting itself in the homicidal form, the inclination and desire to kill is often indiscriminate in its violence, sometimes directing itself against the life of persons indifferent to the sufferer as well as against objects of affection and friendship; and it is impossible for him to restrain the uncontrollable fierceness of the impulse or desire. The act is never influenced by revenge or any of the passions, or a desire to gain temporal advantages from the homicide. It is said to overcome the power of self-control, and to act without motive of any kind, and frequently without premeditation, and consists in the mere violence of the propensity or disposition by which the will is overcome.

"Most certainly, if this form of insanity has any existence, the doctrine of free agency can have no application to one affected with it. It is, at least, of exceedingly rare occurrence, and its manifestations, as has been observed, bear a striking resemblance to crimes. Nevertheless, it is recognized by the medical profession, though it has been rejected by the English courts of justice as apocryphal. Yet it has been adopted by some courts of very high authority in this country, and, what is of more consequence to us, it is impliedly recognized by the supreme court of this State, in the case of Fisher. It is true it was not adopted in that case upon solemn consideration. Yet it must be regarded as the law in this case. But in saying this it is my duty to add, that it was regarded as so perilous in the administration of justice by the court which first promulgated it as a principle of legal science, as to induce the observation that this mania is dangerous in its relations, and can be recognized only in the plainest cases. It ought to be shown to have been habitual, or at least to have evinced itself in more than a single instance, or from its circumstances to bear unmistakable marks of instinctive and uncontrollable impulse. 'Where this affection is alleged,' says Dr. Ray, whose authority is one of the chief supports of this opinion, 'in excuse for crime, it must be proved, first, that it was really present; second, that it had arrived at that stage in which its impulses are irresistible; thirdly, that it should be the exclusive cause of the criminal act.'"

The name given to this form of mental disorder, although sufficiently correct, and founded on the well known principles of mental philosophy, is nevertheless unfortunate. Hence Drs. Bucknill and Tuke, in their excellent treatise on Psychological Medicine, have adopted the term "Emotional Insanity" in its stead. Many minds shrink from the idea of a *moral* insanity, through the fear that this may be a cloak under the shelter of which acts originating in moral evil may escape punishment. Hence the opposition to the recognition of the disease—an opposition which has exposed much ignorance and not

a little obfuscation of ideas on the part of some of those who have made it. It is a significant fact that, in the most violent and denunciatory article against this form of disease with which we have ever met—an article written by a physician, who, by the way, had had no special experience with the insane—the author very learnedly remarks, in substance, that the human mind consists of two groups of powers, the intellectual and the moral, and that, in insanity, both these groups may be affected, or either group alone; thus granting all that is claimed by his opponents, and effectually destroying his whole argument.

Although the temptation is great to an indefinite prolongation of this article, we shall close with a few words upon some of the popular errors in respect to the insane.

It appears to be generally thought that a belief in the exaltation of self to sovereign power is almost a necessary concomitant of mental alienation. This is far from being the fact, although every hospital for the insane has its kings or its queens, its presidents or its Mrs. presidents. The proportion who enjoy this, to them, pleasant delusion, is probably not more than three, certainly not over five, per cent. of the whole number of the insane.

Again, it is almost universally believed that insanity develops or increases deceit, artfulness, craftiness, trickery—that the insane are shrewd, sly, or, to express the whole in one word, the word generally used, "cunning." In very rare and exceptional cases this is true, but as relating to the great mass of the insane it is truth's opposite. Remove the patients from any one of our hospitals, and substitute in their places and under the same circumstances, except the one condition of mental disorder, an equal number of persons not insane, and the amount of "cunning" would suddenly be greatly, and, to the officers and care-takers of the hospital, very annoyingly augmented. With all the modern improvements in the hospitals, the introduction of comforts and the abolition of the means and even the appearances of restraint, still those establishments are, and must ever be, in respect to most of their inmates, places of involuntary detention—of forcible detention, indeed, although the force is exerted with as little demonstration as possible. Now, were the insane one-half as "cunning" as the sane, there is not a hospital in the country that, with its present police and means of confinement, and under its ordinary exercise of oversight and restraint, would not be evacuated, by a general stampede of its patients, within the next four-and-twenty hours. In short, we must acknowledge, although it be with sorrow for the latter, that the insane are more truthful, less artful, and less "cunning," than the sane.

Superadded, however, to the lack of "cunning," there is another peculiarity of the insane which renders their detention easy. They form no very intimate alliances. They have not the element of cohesion. They do not confide one in another. Cabals cannot be created. Conspiracies can have no existence. Plots, if involving more than one person, cannot be matured. A disposition of general distrust, and the fact that, as a rule, each insane person perceives the insanity of his fellow-patients, though, for the most part, oblivious of his own, sufficiently account for this peculiarity.

But of all the prevalent errors in regard to the insane, there is none other fraught with such deleterious consequences, as the impression that they are most easily governed by deception. It is truly marvellous to one accustomed to their treatment, to perceive how almost universal is the practice, the moment a person loses the healthy use of his mental faculties, for his friends or guardians to resort to falsehood in word and falsehood in action, to lying and all kinds of deception, in the attempt to manage him. How truthful soever men may be toward others, they appear to consider themselves justified in converting themselves into everything that is false toward the insane. This course of conduct usually defeats the very object for the attainment of which it is pursued; for, as a general thing, the insane are suspicious, watchful for deceit, and not obtuse in the power of detecting it; and if it be but once perceived by them, all confidence in the person who has practiced it is lost. There will be no further listening to his counsel, no further submission to his wishes, unless he frankly acknowledges his error, promises amendment, and faithfully adheres to that promise. The dislike and even hatred of the nearest relatives and the dearest friends, which is a common and prominent characteristic of the insane, may doubtless, in a great measure, be justly attributed to this grossly faulty method of treatment.

The insane, as is manifest in many things, are much like children. The same policy which will psure a cheerful and wholesome obedience from a child, will meet with a like response from a person suffering under mental disease. As, in the case of parent and child, the mature mind must, as being ight in the nature of things, assert and preserve its prerogative over the mind that is immature, so, in he case of a guardian and insane ward, or patient, the sound mind must, because reason is higher than mreason, assume and retain a directing superiority over the mind that is unsound. But this superiority annot be retained without kindness, candor, truthfulness, and unfaltering firmness. Let no false word scape the lips. Let no promise be made hastily; but, being made, let it be most scrupulously fulfilled. Threaten nothing which is not seriously intended. Let "No" be an absolute negative, and "Yes" a positive affirmative. Let no course of action be decided upon without mature deliberation; and then, whatever is to be done with or for the patient, let him be freely and candidly told of it, together with the reasons, if demanded, which induce such action. If this be properly done, most patients will quietly With some, however, force will be required; but let it ever be remembered that any necessary amount of force is a thousand times better than deception. We apprehend that there is more han one physician to a hospital for the insane who has had more than one patient say to him, "I will lo as you wish, for you never have deceived me."